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ORIGINAL LECTURES.

DEGENERATION OF THE SEBACEOUS GLANDS. ALOPECIA AREATA. TINEA CIRCINATA. GENERAL ECZEMA. ERYTHEMATOUS AND VESICULAR ECZEMA OF THE HANDS.

A Clinical Lecture,
delivered at the Hospital of the University of Pennsylvania.

BY LOUIS A. DUHRING, M.D.,
PROFESSOR OF SKIN DISEASES.

GENTLEMEN: The first patient is a man, thirty-five years of age, with an affection which evidently has its seat in the sebaceous glands. The lesions are multiple, perhaps ten or twelve in all, and are disseminated upon the face and neck, and are largest and in the most advanced stage on the cheeks. They are characterized by the formation of adherent sebaceous crusts seated upon a hyperæmic base. The process is chronic and sluggish, and has existed for five or six years. Notice the complexion of the man and the peculiarities of the skin. He is a typical blond, with yellowish hair on scalp and face, and has a remarkably florid, injected, rosy skin, with active sebaceous glands. The disease is multiple degeneration of the sebaceous glands, a condition which is frequently met with in elderly persons, and occasionally in those under forty. Some of the lesions have already begun to break down and are accompanied by slight atrophic degeneration. Without doubt, in time some one of them would develop into pronounced epithelial cancer of a mild type, and it is this observation which is important for the future welfare of the man. The case at present would hardly come under the designation of epithelial cancer, and may be preferably called degeneration of the sebaceous glands.

A similar case which has been under my observation for the past six or eight years, began just as this case, and has developed into an extensive, ulcerative, epithelial cancer at several points, as on the back of the hand and about the ear. It is, therefore, of importance that all the lesions receive treatment, with the view of improving the tone and nutrition of the glands and of arresting epithelial proliferation. Sulphur here will prove useful in the form of an ointment, one or two drachms of precipitated sulphur to the ounce. Vleminckx's solution,[1] diluted with from one to four parts of water, will also be of value, and may be employed alternately with the ointment mentioned. Salicylic acid may be added to the same ointment with benefit, in the strength of from ten to thirty grains to the ounce. The cure will be slow, probably extending over a period of months. Should some of the more advanced lesions prove rebellious, lactic acid may be applied, with the view of its acting as a caustic. In the matter of diagnosis, lupus erythematosus is to be excluded because the hyperæmic base is not so well defined and circumscribed, nor as inflammatory and active, as in that disease.

[1] Lime 1 part, sulphur 2 parts, water 20 parts. Slack the lime, add the sulphur and water and boil to 12 parts.

ALOPECIA AREATA.

The young colored man before us exhibits a marked degree of baldness in the form of areas, or patches, and to such an extent as to cause disfigurement, more than one-half of the scalp being bald. He is a mulatto, and the disease is rarer in the colored than in the white race. The loss of hair has taken place gradually during the past three months, and there is no apparent cause for the disease. The eyebrows are also involved.

Of late, considerable discussion has again arisen, especially in France, concerning the nature of this process, some dermatologists of high standing stating that there are two forms of alopecia areata, one distinctly neurotic, the other parasitic. Our own experience in Philadelphia, extending over a score of years and including many cases, leads us to believe that the disease is neurotic, though by no means always occurring in nervous subjects, or even due to evident nervous shock or allied general conditions of health. The cause seems to be an arrest (often sudden) of nutrition of the hair, generally of the scalp only, but not infrequently of other hairy regions, and sometimes of the whole general surface.

The parasitic theory, that the disease is caused by an invasion of the hair-follicles by a vegetable growth, a fungus, has not been proved, and for the majority of cases is at variance with the clinical history of the affection.

The treatment is, as a rule, unsatisfactory, in many instances the baldness remaining uninfluenced by the remedies used, whether local or internal. It must never be forgotten that in young subjects the disease tends to spontaneous cure, in from three to six months. As a stimulating application, tar, as a tincture or ointment; sulphur as an ointment; salicylic acid as an ointment or with alcohol; resorcin; and carbolic acid, are all useful. Strong preparations are usually well borne, for the scalp lacks its natural tone, being smooth, shrunken, and pale in color.

Internally, arsenious acid, in doses of from one-fiftieth to one-twentieth of a grain, thrice daily, is the most reliable remedy, and in some cases acts curatively, but in other instances it proves valueless. It needs to be used for a period of from two to six months, and never in excessive doses, always remembering that a tonic effect to the peripheral nerves is the object desired. The prognosis should in every case be guarded, for the disease pursues its course in an irregular, capricious way, often defying the most energetic and faithful lines of treatment.

TINEA CIRCINATA.

This patient is a young woman, twenty-five years of age, with an erythematous, diffuse, slightly scaly patch, involving the orbital and temporal regions, and resembling eczema much more than ringworm, but there is another circular, circumscribed, scaly lesion on the side of the neck, the size of a dime, of two weeks' duration, which is characteristic. There is no history of contagion.

The treatment is simple in such cases: any of the well-known parasiticides, such as sulphur and its compounds; naphthol; chrysarobin; corrosive sublimate and white precipitate will usually effect a cure. A lotion of hyposulphite of sodium, one drachm to the ounce of water, applied freely and frequently, is a cleanly, effective, and safe remedy, and one that we often make use of, both in dispensary and private practice, and will be prescribed in this case.

CHRONIC DIFFUSE ECZEMA OF THE GENERAL SURFACE.

This woman, about thirty-five years of age, spare, pale, and ill-nourished, exhibits over the greater part of the general surface, especially upon the face, scalp, forearms, hands, and thighs, a chronic, erythematous, squamous, and fissured eczema, of many years' duration. She is manifestly a great sufferer, and states that she has been both better and worse than at present from time to time, but has never been free from the disease since it began fifteen years ago. There is now but little active inflammation, but the skin is everywhere thickened, and extremely dry, harsh, and rough, and in many places fissured; while the scalp is the seat of a coating of adherent, impacted, whitish scales, suggestive of psoriasis. The flexor surfaces of the elbows are so much fissured as actually to prevent motion of the joint. It is a severe case, and calls for active internal and external treatment.

The nutrition must be improved before cure can be expected. The various functions should be inquired into, the bowels, stomach, and digestion in particular, and everything that will tend to improve the general and the cutaneous nutrition will be advised. Cod-liver oil, abundance of meat and fat, milk, cream, eggs, bread and butter, and malt extract, should have a place in the diet list. Inunctions with a weak tarry ointment, composed of one or two drachms of tar ointment to an ounce of lanolin ointment (six drachms of lanolin and two drachms of lard oil) will probably prove useful, unless the skin rebel against tar. A weak sulphur ointment, twenty or thirty grains to the ounce, may also be mentioned as likely to be of service. The two may further be combined. Ichthyol ointment, from fifteen to thirty grains to the ounce, is sometimes useful; as is also resorcin, in the same strength.

CHRONIC ERYTHEMATOUS AND VESICULAR ECZEMA OF THE HANDS.

The hands of this woman are inflamed, red, and swollen, the skin thickened and boggy, slightly moist and crusted in minute puncta here and there, with subjective symptoms of heat and itching. Tar has been lately applied, but has aggravated the disease, and apparently a good deal of the active inflammation is due to that remedy. For the present a lotion of boric acid, ten grains to the ounce of water, followed by a dusting powder of starch and oxide of zinc, will be ordered; the wash to be used freely for fifteen or twenty minutes three or four times a day. The hands, of course, to be protected with cloths and a muslin roller bandage. In a few days, the oxide of zinc and starch paste, with ten or fifteen grains of salicylic acid to the ounce, may be ordered. In such cases, calomel ointment, twenty or thirty grains to the ounce, often proves valuable.

ERYTHEMATOUS ECZEMA OF THE LEG.

This variety of eczema is observed in the two middle-aged men before us, and is in the form of reddish, slightly scaly, diffuse, not much thickened, patches on the legs. The disease is similar in both cases, though more extensive and chronic in one than in the other, and being subacute, calls for moderately stimulating remedies, as, for example, an ointment of calomel and oxide of zinc ointment, thirty grains to the ounce, or a salicylic acid ointment, fifteen grains to the ounce. Resorcin may also be mentioned as likely to prove useful.

A CASE OF TRAUMATIC DISLOCATION OF THE LENS, ILLUSTRATING THE THEORY OF VISUAL ACCOMMODATION.

A Clinical Lecture.

BY GEORGE C. HARLAN, M.D.,
PROFESSOR OF DISEASES OF THE EYE IN THE PHILADELPHIA POLYCLINIC.

GENTLEMEN: I have asked your special attention to this case as it presents conditions not often met with for observing the effect of dislocation of the lens upon refraction, and for illustrating the generally accepted theory of accommodation.

The patient, a healthy man, twenty-one years of age, states that about two months ago he was struck in the left eye with a piece of wood, that he has never had severe pain, but that vision has been seriously impaired since the accident. He can see much better, however, on looking downward than when his head is erect and his eyes are directed forward. Well-marked oscillation of the iris at once suggests dislocation of the lens, and, after the use of a mydriatic, it is found that the lens is slightly displaced almost directly downward, leaving a narrow space between its upper margin and the edge of the dilated pupil. Through this space a + 12 D. glass gives a distant vision of $\frac{20}{70}$. When the head is thrown well forward and the eye looks down, the lens assumes very nearly its normal position, and No. 1 Sn. can be read with ease at four inches without a glass. The lens is still nearly clear, though oblique illumination shows a slightly increased reflex, and spicula of opacity are forming on its periphery.

The right eye is, in all respects, quite normal, with a distant vision of $\frac{20}{XX}$, and a near point of four inches.

While the lens in the left eye has been completely detached from its suspensory ligament, it is but slightly displaced from its normal position, and has as yet only partially lost its transparency. There is no intra-ocular hæmorrhage, and no additional injury to the eye, such as

is likely to be inflicted by so severe a blow. The fundus can be seen with the ophthalmoscope with sufficient distinctness to determine that it presents no indication of a myopic formation, which is, in addition, disproved by the refraction of light entering through the space above the lens. In other words, we have here the opportunity to observe, almost without complication, the effect upon the lens of eliminating the influence of its suspensory ligament. This effect has been a degree of myopia which corresponds, with remarkable accuracy, to the accommodative power of the other eye. As the myopia was estimated before we knew the near point of the other eye, and by a member of the class who had no theory to support, the record is not open to suspicion.

You are all familiar with the fact of visual accommodation, and appreciate the necessity for some mechanical contrivance to adapt the focus of the eye to varying distances; but perhaps none of you have any idea how many names famous in science are associated with the study of this point in physiological optics, and what a voluminous literature has arisen from its discussion. Kepler, in 1604, first showed that the eye is a camera forming images, in accordance with optical laws, upon the retina; and demonstrated the necessity that exists in this, as in all other optical instruments, for some mechanism by means of which the image can be kept accurately focussed while the position of the object varies. In other words, he established the fact of visual accommodation. The question of the manner in which this function is performed had still several centuries to wait for its elucidation, which cannot even yet be said to have reached the point of positive demonstration. Helmholtz says there is no other point in physiological optics upon which so many contradictory opinions have been maintained. The apparent impossibility of explaining the process drove many distinguished authorities, long after the time of Kepler, to deny the existence of any arrangement in the interior of the eye for changing the focus, while those who admitted its necessity found their ingenuity severely taxed to suggest a plausible theory.

Each of the following theories has had many earnest and famous advocates. Kepler originated the first, which supposes that the lens is moved bodily forward, without change of curvature, like the lens of an opera-glass. Haller first noticed the contraction of the pupil in accommodation, and thought that it sufficed, by shutting off peripheral rays of light and thus diminishing circles of diffusion upon the retina, to account for the accuracy of near vision. Some maintained that there was a change in the curvature of the cornea, and others that the antero-posterior axis of the globe was elongated by pressure of the external muscles. The latter theory had the support of a number of high authorities, including Buffon, Mickel, Henle, and Listing.

Those observers first struck the true scent who attributed the change of focus to increased convexity of the lens, but they were unable to give convincing reasons for the faith that was in them, and their view was not generally adopted. They thought that the lens was a muscular structure (musculus crystallinus) and that its convexity was increased by the contraction of its own fibres. The name of Thomas Young is particularly associated with this theory. He was the first to support it with experimental proofs, though it had been suggested nearly two hundred years before his time, by Descartes.

The fact that accommodation is accomplished by increase in the convexity of the lens was finally brought to mathematical demonstration by observation of the reflected images of the anterior and posterior surfaces of the lens.

Langenbeck (1849) first showed that changes take place in the size and relative position of these images during accommodation, and Cramer and Helmholtz subjected them to accurate measurement, the former by means of a microscope and micrometer and the latter with an instrument constructed on the principle of the heliometer. Knapp completed the demonstration by a calculation proving that the increase of curvature thus shown is sufficient to accomplish the degree of accommodation effected.

You are familiar with these images in connection with the old "catoptric test" for cataract suggested by Purkinje. When a candle flame is held before the eye, three reflected images may be observed; an erect virtual image formed by the convex surface of the cornea, another of the same kind formed by the anterior convex surface of the lens, and a small inverted actual image formed by the concave posterior surface of the lens, or, more exactly, the anterior surface of the vitreous. It was found that during the act of accommodation the corneal image undergoes absolutely no change either in position or size, and the inverted lens image is just perceptibly diminished, while the image formed by the anterior surface of the lens approaches the cornea and decidedly decreases in size. That visual accommodation is the result of a change in the curvature of the lens is, therefore, a demonstrated fact, but we are still dependent upon theory for an explanation of the exact mechanism by means of which this change is accomplished.

Cramer attributed this function to the iris; supposing that a simultaneous contraction of its circular and radiating fibres exerted a pressure upon the periphery of the anterior surface of the lens, and increased its curvature by bulging forward the centre. This theory was quite generally accepted until Helmholtz reported a case of complete paralysis of the iris, and Graefe one of its traumatic loss, in both of which the power of accommodation remained unaffected. This, of course, threw the iris out of count, and narrowed the discussion to the ciliary muscle as the only possible active agent.

Just how the contraction of this muscle increases the curvature of the lens may be considered still an open question, but the theory of the mechanism of accommodation at present almost universally held to be the most satisfactory, is that advocated by Helmholtz. According to this, the elastic capsule that incloses the gelatinous mass of the lens, will tend to approximate it to the circular form. This tendency is opposed by the suspensory ligament, which is also elastic, and, being attached to the capsule at the periphery of the lens, will keep the latter flattened when in a state of tension. This tension of the suspensory ligament is supposed to exist when the eye is in a state of rest—*i. e.*, when it is adapted to distant vision; while in accommodation for a near point the ligament is relaxed, and the lens is given up to the action of its capsule.

The gray band seen just beyond the attached margin of the iris when the cornea and the anterior part of the sclerotic are removed, formerly described by anatomists as the ciliary ligament, was discovered by Bowman and

Brücke to be composed of unstriped muscular fibres, which have their origin in the region of the canal of Schlemm, at the corneo-sclerotic junction, and their insertion in the ciliary processes as far back as the ora serrata. When the ciliary muscle and ciliary processes are removed, a beautiful zone with radiating lines is seen, which is still often designated by its old name of zonula of Zinn. The retention of this name, however, can only lead to confusion in the minds of students, as this structure is the suspensory ligament of the lens, and had better be known by the term that indicates its function. It is an elastic transparent membrane, usually described as a continuation of the hyaloid membrane, which becomes thicker and stronger and more elastic at the ora serrata. The appearance of radiating dark-brown striæ is due to the fact that this membrane is thrown into grooves in which the ciliary processes are received, and when we remove the latter some of their pigment is left behind.

For our present purpose we may consider the ciliary ligament as an elastic membrane stretched between the ora serrata and the margin of the lens, and assume that its traction is relaxed when the ora serrata is drawn forward by the contraction of the ciliary muscle. In the case of our patient, the lens is torn away from the ligament, and the elastic contraction of its capsule is, therefore, unopposed, and we find the eye focussed for a near point which corresponds exactly with that reached by the strongest accommodative effort of the other eye. It may seem somewhat anomalous that an organ should be made to "function" by complete separation from all its anatomical connections, but it is, nevertheless, a well-known fact that a healthy lens becomes more convex when removed, with its capsule intact, from the eye.

ORIGINAL ARTICLES.

ALBUMINURIA IN THE APPARENTLY HEALTHY.[1]

BY W. H. WASHBURN, M.D.,
OF MILWAUKEE.

DURING the past ten or fifteen years great activity has been displayed in investigating the causes and probable results of albuminuria unassociated with those forms of kidney disease to which the name of Bright has been attached. The subject has occupied a considerable portion of the time and attention of the great medical societies on both sides of the Atlantic. At the meeting of the Association of American Physicians held at Washington, D. C., in 1888, Professor Tyson, of Philadelphia, presented a paper entitled "The Relation of Albuminuria to Life Insurance." At the meeting of the British Medical Association held at Leeds, in 1889, Professor Pavy read a paper entitled "A Discussion of the Prognosis of Cases of Albuminuria, with Special Reference to Life Insurance." These papers were fully discussed.

Tyson objects to such terms as normal, physiological, intermittent, cyclical, and alimentary albuminuria, and proposes the term "functional" as meaning "that there is somewhere a functional derangement, as a result of which, without structural alteration in the kidney, albumin transudes through the vessel walls along with the normal urine constituents." For myself, I object to the term "functional disease," believing that there is no perverted *function* without perversion of structure. Dr. George Johnson (*British Medical Journal*, February 2, 1889, p. 225) objects to all these terms and proposes in their stead "latent albuminuria."

We understand by latency that which is hidden, concealed, or inappreciable. Latent heat is the best example we have of latency, and latent heat is absolutely inappreciable, either to the senses or by the thermometer.

The form of albuminuria to which it is proposed to apply this name cannot properly be compared with latency as we are thus acquainted with it, for this albuminuria is as appreciable as that which accompanies grave kidney disease. Hence I believe "albuminuria in the apparently healthy" to be a designation the most free from objection.

Dr. Pye Smith, of London, examiner for an English life insurance company, says he relies upon the heat and nitric acid tests for albumin, and deplores the introduction of new chemical tests on the ground that we will thereby "imperil the clinical results of the past fifty years." The philosopher seeks truth and should care nothing for the effect which the discovery of such truth may have upon the "clinical results of the past fifty years." What we desire to ascertain is, what relation albuminuria in the apparently healthy bears to the expectation of life; and if such expectation is diminished, our business is to investigate as to the best means of checking the appearance of albumin in the urine.

At the present time the balance of opinion is decidedly in favor of the view that there is no such thing as physiological albuminuria, but that it is pathological in every case, even though a mere trace be present. There is danger that "the long-continued filtration of albumin among the gland cells of the convoluted tubes may by degrees so disorganize them as to render them incapable of performing their excretory function." However, Dr. George Johnson has recorded cases of seven, ten, fifteen, and twenty years' standing which have not resulted in serious disease of the kidneys; the case of seven years' duration fully recovering.

While it has been abundantly proven that albumin may be present in the urine in considerable quantity without indicating serious disease of the kidneys, it is also true that serious disease of the kidneys may be present without the appearance of albumin in the urine. Mahomed demonstrated by post-mortem examinations at Guy's Hospital that this may be the case, the only indications pointing to kidney dis-

[1] Read before the Milwaukee Clinical Society, March 11, 1890.

ease being "increased tension of the pulse," a "heaving left ventricle," and increased quantity of urine. These observations have been confirmed by Dieulafoy, and this has been called the pre-albuminuric stage of Bright's disease. Bartels, of Kiel (Ziemssen's *Cyclopædia*, vol. xv. p. 440), relates a case of granular degeneration of the kidneys which was under his care for some time, in which no albumin appeared at any time, and hence the fact that renal disease existed was not discovered during the life of the patient, but was made apparent at the autopsy. This case was remarkable, also, in that the temperature of the patient in the rectum sank to the low point of 83° F., from which condition the patient rallied and lived some weeks. Professor Da Costa relates a case in his work on *Diagnosis* (4th edition), where there was a marked deposit for some time of crystals of oxalate of lime, accompanied by tube-casts of the hyaline and waxy varieties, and yet no albumin was detected either by heat or nitric acid. Under treatment the oxalate of lime crystals disappeared from the urine, also the tube-casts, and there has never since been any indication of degeneration of the kidneys. The question arises here as to whether albumin would not have been found in these cases had some of the later and more delicate tests been applied.

Dr. Posner, quoted by the *American Journal of the Medical Sciences*, July, 1887, p. 236, says that he believes that serum-albumin is normally present in the urine in infinitesimal quantities, but still sufficient, in most cases, to be detected with such delicate tests as picric acid. Normal urine contains 0.00032 per cent. of mucin, and there is often present a much larger quantity, and as picric acid will detect albumin when it is present in the proportion of 0.00015 per cent. it would not be strange if enough albumin were liberated in solution to give the reaction with this delicate test.

In order to verify this opinion of Posner I tested with picric acid by the contact method, and also with the phenic-acetic test, and with a solution of citric acid of a specific gravity of 1008, by the same method, samples of urine from fifty persons in perfect health, all living in good sanitary surroundings, and in easy circumstances. Their ages ranged from fourteen to fifty-five years. In every instance, at the line of contact of the two fluids, the characteristic cloud appeared with more or less distinctness, indicating the presence of an albuminoid.

Grainger Stewart some time ago reported finding albumin in the urine in 31 per cent. of 407 persons examined in apparent good health. These people were all in the lower walks of life and living in unsanitary surroundings. In none of these cases were any other evidences of renal disease found.

Dr. G. R. Shepherd, in a recent paper before the Connecticut Medical Society, reported albumin present in the urine in two per cent. of 35,000 cases collected from various sources; that the percentage was greater among brain-workers than among muscle-workers; and that while in healthy persons it did not appear after meals, in those who suffered from dyspepsia and oxaluria it was very apt to appear.

During the twenty-two months between April 1, 1888, and February 1, 1890, I examined 338 applicants for life insurance, in which an examination of the urine was required. These applicants were all apparently healthy. Albumin was found in the urine in twenty of these cases, being 5.91 per cent. It would, of course, be interesting as well as instructive to be able to follow up all these cases and trace, if possible, the albuminuria to its cause, but this, in the nature of things, could not be done. Nevertheless, I have been fortunate enough to be able to investigate a number of them, and have selected three which are reported in this paper.

CASE I.—W. J. A , aged thirty-four years, light complexion; height five feet ten inches; weight 150 pounds. Family and personal history good; habits of life correct; very temperate in the use of alcoholics, in fact almost a teetotaler. He is a brain-worker. Examined, February 27, 1889. Urine: specific gravity 1024, reaction acid, albumin present in sufficient quantity to be shown by the contact method with nitric acid. Specimens of this gentleman's urine were examined, which were passed at different hours of the day, from immediately after rising in the morning to the last thing before going to bed at night. That urine which came first from the bladder was examined separately from that which came last. In every instance the albumin appeared in about the same quantity. The urine was strongly acid in reaction, and ranged in specific gravity from 1010 to 1026, being usually about 1018. No casts were found in the urinary sediment at any time. I had examined the urine of this man several times previous to February 27, 1889, and had found it normal. The fact, therefore, that the specific gravity and amount were normal, and that the microscope revealed oxalate of lime crystals in great abundance in the urinary sediment, and the further fact that he was annoyed by flatulent indigestion, led to the diagnosis of albuminuria, due to the presence in the urine of the sharp and irritating crystals of oxalate of lime. These crystals, moreover, were found in the urine immediately after leaving the bladder, indicating that their presence there was not due to chemical action after the urine was passed. The formation of the oxalate crystals was attributed to digestive disturbances. Nitro-muriatic acid was ordered with each meal, March 16th; on March 20th the urine was free from albumin, and has remained so, the last examination having been made November 29, 1889.

CASE II.—J. C. S , aged thirty-one years, foreman in a printing establishment. Good family

and personal history. A year before the date of examination, this man suffered from typhoid fever, was not critically ill, but during the course of the disease had some urinary trouble, the urine being suppressed for nearly two days. September 16, 1889, I examined him for life insurance. The urine was passed at 2 P.M.; specific gravity 1022, reaction acid, albumin present in quite large quantity. On examination of the urinary sediment, the microscope revealed a few crystals of oxalate of lime, epithelial cells, a few leucocytes, cylindroids of mucin, and a few hyaline tube-casts. September 18th, two examinations failed to show any albumin in the urine; the microscopic examination showed only a few leucocytes in the sediment. September 19th, no albumin, the microscope showing only a few epithelial cells and cylindroids of mucin. From September 20th to November 1st repeated examinations failed to show the presence of albumin. Since the time when the patient suffered from typhoid fever, he has noticed that whenever he has a "cold" his urine is passed in smaller quantities and oftener than normal, and such was the condition of affairs when the first examination was made.

Dr. Wilks (*Lancet*, March, 1873, p. 147) says albuminuria may be caused by a "cold," that cold may set up a condition of the urinary tubules similar to that of the bronchial tubes, and that the condition may be only temporary, but that if it continues six months it is apt to become incurable. This case appears to me to be one of this origin, due to temporary catarrh of the urinary tubules.

CASE III.—The third case to which I wish to direct attention is that of an attorney, aged twenty-five years, of sedentary habits. His father died of apoplexy, at the age of fifty-eight years, and his mother of consumption, aged thirty-one years. Family history otherwise good. He has never undergone any sickness himself. Height, five feet ten inches, weight 185 pounds. Examined June 8th, when he appeared in robust health, the pulmonary and cardiac sounds being normal. Pulse 76, regular, steady, and soft. Urine passed at 3 P.M., acid, specific gravity 1022, free from sugar. Albumin present in sufficient quantity to be detected by cold nitric acid test. Microscopic examination of sediment entirely negative. From June 8th to November 1, 1889, examinations were made of his urine eight or ten times per month, at all hours of the day. Numerous microscopic examinations were made during this time. There were found at times epithelial cells which I thought were from the bladder; on one occasion crystals of oxalate of lime; sometimes cylindroids of mucin, and, on June 22d and July 1st and 4th, a few hyaline tube-casts. Albumin was found in every specimen of urine, passed at all hours of the day. During all this time the specific gravity was about normal, the lowest being 1014, and that only once, the range being from 1018 to 1026. Every specimen of urine examined was markedly acid. Theorizing, then, that this albuminuria was possibly due to commencing lithæmic nephritis, I prescribed lithia water, and restricted his diet. I afterward tried lithiated hydrangea and a vegetarian diet. The urine continuing to be strongly acid, and the albuminuria persisting, I prescribed phosphate of sodium and then Vichy water. The Vichy water rendered the urine alkaline, but the albuminuria was entirely uninfluenced by the treatment. About November 1st the patient entered a gymnasium, and since that time has devoted, on an average, one hour per day to active exercise; by this means he has reduced his weight to 166 pounds. About the middle of November the albumin disappeared from his urine, and has not been detected since.

Now, it seems to me that—if it be true that the function of renal epithelium (among other things) is to convert albuminous constituents of the blood, not elsewhere converted, into urea and other nitrogenous excreta, as explained by Ralfe—this case admirably illustrates a condition under which the epithelium was unable to discharge thoroughly this function. A young man, of full habit, a good eater, florid complexion, in fact plethoric, leading a sedentary life, the blood containing more albuminous constituents than were converted by the liver and in the muscles of the body, and more than the renal epithelium was able to convert, and hence a certain amount was allowed to filter through into the tubules, and to escape with the urine.

Diet made but very slight difference in the amount of albumin passed in the urine. Medicines produced no effect whatever, but the moment increased muscular activity resulted in the conversion of a larger amount of albuminous blood constituents into urea, so that there was less to be converted by the renal epithelium, albumin disappeared from the urine.

803 GRAND AVENUE.

THE CORPUS LUTEUM "OF PREGNANCY" IN NON-PREGNANT WOMEN.

BY BARTON COOKE HIRST, M.D.,
OF PHILADELPHIA.

IN the past year I have seen two cases that might come under this heading: well-developed corpora lutea, exhibiting all the macroscopic appearances of these bodies at the period of greatest development in a pregnant woman, and yet situated in ovaries taken from women, beyond a doubt, not pregnant.

CASE I.—Miss S., aged twenty-four, a very small, fragile-looking person, with no mammary development. First menstruated at nineteen; since then her menses have returned at irregular and long intervals. At the menstrual period, although there may be no flow, the girl has intense headaches and disturbances of vision, with an aggravation of pains in the back and left groin, which constantly trouble her to some degree. She has consulted several ophthalmologists, who told her that the eye symptoms were reflex, depending upon some abnormality in the sexual organs. For three months past she has been treated, without success, by a well-

known gynecologist, who finally advised an oöphorectomy. She was sent to me by Dr. Oliver, who was treating her eyes, for examination and treatment. *Examination:* Uterus infantile, scarcely larger than the terminal joint of one's thumb, in good position, and movable. An enlarged ovary, very sensitive, to be felt on left side. I recommended an exploratory incision, and, possibly, an oöphorectomy. The operation was done in April, 1889. Both ovaries, congested and enlarged, were removed. That upon the left side contained a corpus luteum in every way like the same body of pregnancy in its fullest development. It measured three-quarters of an inch in length, a trifle less in breadth, and occupied about half the ovary. (Fig. 1.)

FIG. 1.

This inequality in development of ovaries and uterus, although observed before, is to me very strange. Ovulation here, no doubt occurred in a regular and vigorous fashion, while menstruation, as a rule, failed to appear. The sexual organs, deprived of their periodic depletion, remained constantly congested, and the individual was made miserable, and incapacitated for work. She is now, a year after the operation, employed as a store-girl, and is almost entirely free from her former symptoms.

CASE II.—F. R., aged twenty-three, had her first child fourteen months ago. Since her delivery menstruation has returned but four times. She complains of severe pain in the right lower abdomen, which has disabled her, and compelled her to enter the Philadelphia Hospital for relief. *Examination:* Uterus enlarged, cavity 3½ inches; in fairly good position, partially fixed. In right broad ligament is a large, firm tumor, intimately attached to the uterine wall, and extending out toward the lateral wall of the pelvis. With the idea that a pyosalpinx existed, laparotomy was advised and agreed to. The tumor was found, however, to be an extra-mural fibroma, growing between the layers of the broad ligament, and associated with some pelvic inflammation. Both ovaries were removed. In one a corpus luteum "of pregnancy" was discovered, as illustrated in the accompanying cut taken from a photograph. (Fig. 2.)

It may be claimed that there is an element of doubt in this report, but intra-uterine pregnancy was excluded by the size of the uterus and a long-continued observation of the patient, while interstitial pregnancy was excluded, I think, by the fact

FIG. 2.

that the tube ran above the tumor and was not inserted in the upper, outer corner of it. These two cases illustrate, what is already known, that the corpora lutea "of menstruation" and "of pregnancy" are the result of congestion different in degree and duration, and have nothing to do specifically with the conditions from which they are named. One comes from a temporary hyperæmia of the ovary, associated with rupture of the Graafian follicle; the other from a hyperæmia of higher grade and longer duration. It will be observed that the mere presence of over-grown corpora lutea in the ovaries did not constitute an indication for their removal. This, naturally, it should never do, and yet oöphorectomy has been advocated for "endothelioma of the ovary," which, to my mind, is nothing in the world but the proliferating cells of membranæ granulosæ in ruptured Graafian follicles engaged in the formation of corpora lutea.[1] This, it seems to me, is also the explanation of the tumors described by Dr. Heneage Gibbes,[2] although he distinctly states that corpora lutea can be distinguished from the growths he describes. A careful microscopic study of my specimens will be made by Dr. Piersol, Professor of Histology and Embryology in the University of Pennsylvania, who will prepare a description of their histology.

248 SOUTH SEVENTEENTH STREET.

Bellevue Commencement.—The Bellevue Hospital Medical College, at its recent commencement, conferred diplomas on 144 men.

[1] M. A. D. Jones: New York Medical Journal, September 28, 1889.

[2] Boston Medical and Surgical Journal, January 30, 1890.

THE WAKEFULNESS OF NEURASTHENIA AS AFFECTED BY SEASIDE RESIDENCE; ITS SUCCESSFUL MANAGEMENT AND CURE.

BY W. H. DALY, M.D.,
OF PITTSBURG, PA.

OF all the suffering to which unfortunate humanity is subject, none can compare in its horrible character to the persistent insomnia that is made worse by hypnotics, and especially worse by a residence at the seaside. About twenty-two such cases have fallen under my notice while getting a history of concomitant disease of the upper air-passages, for which they consulted me, during the past three years, and I have been further interested because of a case in which I was peculiarly concerned, and of whose history I have been fully informed.

It is not my purpose, however, to weary the reader with the details of cases, but rather to give the summary of my observations, and earnestly to call attention to the great need for discrimination in the sending of patients afflicted with insomnia to the seaside; and more especially to ask those who are located at seaside resorts, not to allow their honest zeal and enthusiasm for a particular and pet resort to lead them to believe that its air and surroundings will cure anything, from knock-knees to a disposition on the part of children to scratch furniture. The average medical man may make the mistake of sending a neurasthenic patient who has insomnia to the seaside, that would be better at some quiet inland resort, or possibly better at home, but the experienced medical man at the seaside should, in such a case, have the moral courage to say promptly to such a one, who is not likely to be benefited: This is not the place for you to obtain a physiological cure of your insomnia—the only cure worth having, by the way, and the only one, especially, that a medical man, if so afflicted, should ever undertake to accept, since the perilous practice of purchasing sleep by means of hypnotics is one that in *his* hands must sooner or later lead to destruction, permanent and irreparable, if persisted in, as these means, alas for his own welfare, are so readily obtainable by him. Now what shall we do for the sufferer from insomnia? If we find his own home must be abandoned owing to business cares that will occupy his mind and attention if he remains, and if we also find the seaside aggravates the wakefulness, then send him inland far enough to get him away from the ocean's roar, while he will still have the tonic effect of the sea air, if by a brief experience in this he should prove to profit by it. But do not persevere in trying to have your patient *overcome* obstacles that he ought, and you ought to have him, simply to shun, and thereby gain time and comfort for him and hasten his cure. In other words, do not insist too strongly that your patients shall repeatedly and with futility try to adapt their unfortunate conditions to your cast-iron notions of sanitary regimen; but rather adapt your regimen to fit the conditions of the case. This will require no little study on your part, but success will repay the labor of thought in this respect. The patient ought to be encouraged to join quiet friends in quiet amusements, but even this should not be insisted on too strongly. The exercise should be of the quietest kind. I have known eminent neurologists who advised their insomnia patients rather indiscriminately to take horseback exercise. Now I have known the excitement and tension due to this exercise, in many cases, to be followed by wakefulness quite surely and certainly and upon repeated trials. Conversation or cards after supper, or a pleasant short walk before bedtime, and, before retiring, the cold douche to the head or the feet as experience shall dictate. In fact, the regimen in insomnia is largely a matter of experience, and not to be adhered to with unreasonable pertinacity. But absolute quiet is one of the essentials for the wooing of sleep, to the wakeful neurasthenic. The walking over the floor above or some one taking a bath in an adjoining room, or the crowing of a cock, or the gnawing of a mouse, or the rustling of the leaves on the trees beside the window, or the chirping of a cricket will be sufficient to rivet the attention of the insomnia patient and destroy all vestige of sleep, until from utter exhaustion a half hour of partial oblivion may be obtained long after daylight, when there is a lull or period of repose and quiet between the noises of the night and the coming day of bustle and business.

No talk of business or upon business subjects or enterprises should be indulged in, especially in the after-part of the day; this is most certainly fatal to the securing of sleep. Nothing irritating should be said by friends, and all subjects that are known to be distasteful to the wakeful patient should be strictly tabooed, as the wakeful neurasthenic is sensitive to an extreme.

Now that we have said briefly what not to do for this class of patients, it is in order for us to ask what we shall do for their comfort and restoration—for what secures the former is certain, sooner or later, to be followed by the latter. Briefly, it is this: Get along without hypnotics or so-called nerve tonics; the one hundred and one preparations of the phosphates are a fashionable therapeutic fad, that the manufacturer got up for the benefit of his own pocket, and are about as groundless in therapeutics as the statement of the ostensible German savant, which we have all swallowed, more or less, viz., "Without phosphorus there is no thought"—"Ohne Phosphor keine gedank." Now, this is a most thoughtless statement, and cannot be verified,

and the exhibition of the phosphates in any case must act—if they do any good at all, which is questionable—by reason of the other ingredients which render them more or less an elixir and a simple tonic.

The most efficient plan of treatment in the wakeful neurasthenic is a mild alterative and tonic plan, coupled with a close attention to the state of the liver by means of mild mercurial laxatives. I say the liver, but I should also say the stomach, as these two organs are the ones that will reflect their influence upon the brain. A quarter of a grain of calomel at bedtime, with two drachms, more or less, of fluid extract of senna every night, or second or third night as needed, until the yellow stools, nearly always present in the neurasthenic, are tinged with bile. Keep this condition up and keep up the treatment, being careful not to ptyalize. Use wines or whiskey, when they agree, but in the most moderate quantities, and only in those cases where there is no feeling on the part of the patient of a sense of heat in the head or other evidence of cerebral congestion. In congestive cases, four to six leeches applied to the mastoid region at bedtime, and the wounds allowed to bleed until they stop of themselves, will prove of nearly certain benefit, and very often cure. If one trial of the leeches disappoint, repeat it in a night or two, or even take blood from the arm until cerebral congestion is manifestly relieved, and thus enable the distended cerebral vessels to regain their tone, in order that they may assume the needed anæmic condition required for natural slumber. And while you are keeping all this in view, I may assure you without doubt that the practitioner who attends to the condition of the liver, stomach, and secretions from the alterative standpoint is the one who will restore his patients to health again. We have had, and now have, much of so-called restorative medicine; and we follow the fashions of the day as strictly and surely in medicine—shame it is to confess it—as do the fair proprietresses of a dozen bonnets or gowns, and we look to a few leaders who set the styles in our therapeutics and we follow them blindly until we stumble across some new fellow who thinks he knows it all, and, like the hounds who have jumped a new hare, we dash after him until we lose the trail, or rather, lose our patience with a *c*, and sometimes also, lose our patients with a *t*.

Broussais is dead, his doctrines are long since dead and buried; let's look the old fellow up again, and apply some of the hints that he can give as to the physiological doctrine of the liver; put some of the old therapeutics in force with reference to the liver in your wakeful neurasthenics. Do it gently, however; do not try to coax it into action by means of trifling placebos, but put the spur gently to the old laggard and see that its rowel is deftly covered with an amalgam, and this with rest, coupled with quiet and reasonable time, proper food, and mild tonics, will do more, and do it permanently, than all of the so-called nerve foods and brain foods and other swindles with which the credulous doctor and more credulous patient are commonly at the present day carried along with that hope deferred which always maketh the heart sick.

THE OPERATIVE TREATMENT OF HIP DISEASE.[1]

BY DE FOREST WILLARD, M.D.,
CLINICAL PROFESSOR OF ORTHOPÆDIC SURGERY IN THE UNIVERSITY OF PENNSYLVANIA, SURGEON TO PRESBYTERIAN HOSPITAL, ETC.

I TRUST that it will not be inferred from the title of this paper that I look upon the operative treatment of hip disease as the chief element in the management of this affection; on the contrary I regard mechanical and hygienic measures as of the greatest importance, and acknowledge that operative procedures are, like amputations, confessions of defeat; yet operative measures are necessary in a considerable number of cases.

It may, perhaps, be very justly claimed that there are two classes of orthopædic surgeons; the one, viewing apparatus alone as the chief element in the cure of all malformations and deformities; the other class regarding orthopædic surgery as a branch of general surgery demanding the highest degree of general surgical knowledge and skill, yet insisting in addition that mechanical measures and the various forms of apparatus, both before and after operation, are of just as much importance as is a splint after the reduction of a fracture, the necessary reduction and adjustment of the fragments being but a small part of the cure.

Relapses and poor results will occur in the hands of the most careful orthopædic surgeons from neglect and ignorance on the part of the patient, but the worst and most frequent failures are found in the cases where the surgeon, by his words and acts, gives rise to the assumption that he has cured the disease by operation alone. I acknowledge that my predilections and surgical training render me partial to the speedy results of the knife; yet, I value in the highest degree mechanical measures both before and after operation, and am also especially careful to put the system in the best possible condition to resist the tuberculous process.

A wise decision as to the class of cases of hip disease requiring operative means is an exceedingly important one. I must confess that I am often puzzled in regard to fixing an absolute line beyond which it becomes imperative to interfere. I should be exceedingly glad if the American Orthopædic Association could agree upon absolute rules in regard

[1] Read before the American Orthopædic Association, at Boston, September, 1889.

to cases that should, or should not, receive operation; but from my knowledge of the practice and teaching of the several members composing this body, I am sure that there would be a great diversity of ideas and of practice; from those, on the one hand, who never operate, to those on the other who practically make excision their rule of practice.

Cases concerning which there is the least doubt are those in the third stage, with multiple sinuses pouring out unhealthy pus, which drain is rapidly exhausting the patient and threatening dissolution. Yet certain surgeons contend that cases in the late suppurative stage are only suitable for drainage, not for excision. Other cases demanding interference are those showing undoubted evidences of extensive degeneration of tissue with great flexion and adduction, as are also those extremely painful cases of caries sicca, where, without suppuration, the patient sinks, and all forms of mechanical treatment fail to give relief. Albuminuric cases and those showing evidences of commencing waxy changes can often also be benefited by operation, but all these cases have for years been looked upon as at least justifiable ones for interference.

With increased knowledge, however, and especially with increased facilities for operation, due to the greatly diminished risk secured by the use of antiseptics, we ought to advance our lines and rescue a larger number from the tedious delay and crippling results which are so common in this disease. These cases deserve at our hands the most careful attention and skill that can be given them, and American surgery, quick to embrace successful practice, no matter from whence it originates, should give no uncertain sound.

As to the necessity of operation, much will depend upon the condition and surroundings of the patient. It is very justly claimed that in many cases operative means are unnecessary, and there are many surgeons who hold that excision is never necessary. Personally, I can say, as regards the value of careful attention to detail and the application of strict mechanical control, that I consider them so valuable that I have never yet excised a hip-joint in private practice where the individual has been under my care from the inception of the disease. I believe that it is very rarely required under such circumstances, but there come to all of us a great mass of cases with hips riddled with sinuses, pouring out quantities of pus, whom we cannot treat with any certainty that a single instruction will be thoroughly followed, and, with the almost absolute certainty that the disease will rapidly progress or that death will follow. This class of cases stands upon an entirely different basis and must be treated in the way that will give the best results in the shortest time, and we cannot hope to accomplish even that little unless they are received into the wards of a hospital. Instructions that are disobeyed, apparatus that is misapplied, can never give good results.

Before operating it is important that we consider three questions:

1. Is life saved?
2. Is time gained?
3. Is the resulting limb more useful?

1. Is life saved? To answer this question properly would require a careful study of what may be called the natural death-rate from hip disease practically untreated, and secondly, when carefully treated with the utmost attention to every detail, and by various forms of mechanical appliances. It is exceedingly difficult to classify the statistics upon this point, because there are only a few cases in which a certain form of treatment is not instituted; and secondly, even with apparatus there is the greatest diversity of methods. In the large majority of cases, moreover, treatment is interrupted by the patient being placed in the care of some other physician, and thus the course of the case in its entirety is lost and it becomes valueless as regards statistical importance. This is true more frequently as regards hip disease than of other conditions, for the reason that treatment of these cases extends over several years, and there is, therefore, greater opportunity for such change.

Judging from Thomas's statement, we would consider that all cases, even suppurative ones, are curable without deformity, while Hueter takes the gloomy view that only 5 per cent. of suppurative cases, with flexion, adduction, and internal rotation, heal; in fact, he looks upon tuberculous suppurative cases as practically hopeless.

Gibney in eighty cured cases found that forty-eight, at least, had had abscesses. Yale gives the death-rate of conservatively treated cases, without operation, as 31 per cent.; Gibney, 12 per cent.; Clinical Society of London, 33 per cent.; Taylor, 2½ per cent.—the latter all in private practice.

In cases not operated upon one-half are suppurative and 50 per cent. recover without serious loss of motion.

In 837 cases of excision 19 per cent. of the deaths following operation were from rapid miliary tuberculosis.

In 144 cases Sack gives the death-rate as 25; 13 of which were from tuberculosis.

Frosch reports 166 excisions, with 33 per cent. of deaths, one-half of which were from tuberculosis.

Croft reports that 30 per cent. of deaths are from tuberculosis. Under antisepsis the death-rate has diminished, after excision, from 33 to 15 per cent.

Marsh gives 401 cases of hip disease treated without operation, of which 31 per cent. did not suppurate. Of suppurative cases 42 per cent. were cured, and of non-suppurative cases 69 per cent. In suppurative cases treated without operation 33 per cent.

died, as against 10 per cent. in non-suppurative; 9 per cent. of the latter recovered with useful limbs, and only 10 per cent. died, of which deaths 9 per cent. were from tuberculosis.

The percentage of deaths in suppurative cases which occurred from albuminuria, waxy degeneration, and exhaustion could probably have been saved by early excision. Of late excisions 69 per cent. re-suppurated.

In Marsh's collection of 614 cases treated by prolonged rest the mortality was 6 per cent., but it is not proper that the mortality of these cases, which probably were suppurative in a minor degree, should be compared with the 20 per cent. of deaths from excision, as the circumstances of the cases were entirely different. In late excisions 10 per cent. died, and from 20 to 30 per cent. showed no improvement. In the first stage the mortality is, as we know, from 6 to 8 per cent. In the late stage of suppurative cases with amyloid degeneration, the mortality rises from 30 to 50 per cent. By thorough rest the mortality has been reduced in the Alexandria Hospital from 30 to 5 per cent., while 70 per cent. recover with slight loss of motion.

Croft puts the general mortality of hip disease as 35 per cent. Although one of the arguments in favor of early excision is the prevention of tubercular infection, yet, as eighteen or nineteen escape this danger in the natural course of the disease to one that becomes infected, this one does not justify the deforming results of early operation; especially if, as in the early stage, it is impossible to diagnose the exact number of foci of disease that are present, or that may exist in other portions of the body.

The effect of operation upon the mortality from tuberculous infection seems to be very slight.

My own estimate of the natural death-rate in this country would certainly not fix it above 15 to 20 per cent., while in private practice the result would be below 5 per cent.

The death-rate from excision, like that of the normal death-rate above referred to, varies exceedingly, and gives rise to as great a diversity of opinion. Leisrinks gives 63 per cent, Sayre 34 per cent., Culbertson 41 per cent., London Clinical Society Report 37, Caumont, before the use of antisepsis, 66, after its introduction, 41 (11 per cent. died from the operation). Wright, out of 1700 collected cases, makes it 33 per cent., which seems a fair deduction.

Wright states (*British Medical Journal*, December 15, 1888) that incision has not given him any better results than excision; consequently we may, for the present line of argument, practically consider them as one operation.

The saving of life is, of course, the most important consideration of the surgeon, but, if the question were to be considered from this standpoint alone, we should at once join the ranks of those who advise early excision, since the risk from operation at that stage would not be great with asepsis, and in many cases of tubercular infection death would be avoided. Carrying out this line of reasoning, we should arrive at the *reductio ad absurdum* that all cases of hip inflammation should be excised so early that there would be no possibility of the disease being more than a local difficulty.

But even if the saving of life is a prime consideration, other objects must not be overlooked. A large percentage of operative cases die from lardaceous degeneration, of exhaustion from suppuration, or from tuberculous conditions—few from the operation itself.

It would be obviously unfair, however, to compare the results of excision with the results of all classes of cases dying from what may be called the natural results of hip disease, since operative cases, as a rule, are selected from the very worst. The only just method of comparison would be to compare 1000 cases of excision with 1000 equally serious ones, which did not require operative treatment. Could such a comparison be instituted, I believe that the operative course of treatment would yield a less percentage of deaths than the more conservative plan; while at present it occupies a higher place. Were we to compare early resection with similar cases where rigid rest has been secured to the articulation during treatment, doubtless lives would be saved and time gained by the former plan; but as regards locomotive powers, the balance would be in favor of rest.

2. Is time gained? With the practice of antisepsis, which favors rapid healing, we frequently obtain speedy closure of the wound. If any one wishes to have excellent statistics, let him report all cases about the sixth week "perfectly healed." But wait a few weeks more; a small sinus appears, a long period of suppuration follows, and the patient either finally dies, or is cured at the end of possibly a little shorter period than would have been occupied by a natural cure, but the limb is less useful as a walking member.

Even Croft, who favors early excision, acknowledges that the majority of his cases require close watching from one to two years after excision—one-half of them two years, and that ultimate suppuration is very likely to appear.

Wright acknowledges that only 17 per cent. of cases of excision are satisfactory in their results; that 25 per cent. were absolute failures, and that nearly 60 per cent. were suppurating a year after operation, making over 80 per cent. with unsatisfactory results. The cases reported within a few weeks or even a few months after the operation are

not relapses; the disease has continued uninterruptedly in spite of operation, but, as in non-operative cases, the pus has been slow in coming to the surface. True relapses are so common in apparently cured cases as to warn us against too great enthusiasm. I am at the present time treating five cases of relapsed hip disease that have returned after forty-five, nineteen, sixteen, ten, and six years respectively.

In removal of diseased bone-tissue either by excision or by erasion, the underlying layer of bone-cells is necessarily injured, and the inflammation thus set up causes caries with opening of the sinuses and suppuration for a certain period of time. To minimize this element of failure, the scoop should be very sharp and all fragments should be washed out immediately.

Excision in the later stage will undoubtedly yield from 8 to 10 per cent. of deaths within the first few weeks after operation, and fully three-fourths of the cases may be expected to relapse. In probably one-third of the cases improvement is favorable at the beginning, but the return of the disease in the next few months is to be confidently expected. When tubercle has again inoculated the soft tissues a vigorous scraping and cutting out of sinuses may hasten closure.

In cases of great deformity, with marked shortening of the limb and great adduction across its fellow, decided gain in position may be secured by excision, although if these cases are progressing favorably they may be permitted to ankylose when subsequent osteotomy will bring them into good position. In suppurative cases tubercular infection of the system is to be expected in from 5 to 8 per cent. In non-suppurative cases the percentage is still less.

3. Is the limb after excision as useful as the one which nature, assisted by the surgeon's care, is capable of securing? In the large majority of cases, unquestionably no! The loss of the bone, even in one of the worst cases of disintegrated tissue, is seldom as great as in complete excision where the trochanter major is sacrificed. Even in suppurative cases, where there has been absolutely no operative interference, where the joint has been thoroughly fixed, and even although ankylosis has followed, the result is an excellent walking member, and the vertebral column (especially in a child) gives wonderfully compensatory movements. For the working man or woman a stiff joint is incomparably better than one in which the pelvis is insecurely steadied upon the femur, while extensive resection in early childhood may, by the removal of the epiphysis, so interfere with the growth of the member that the limb may be rendered almost useless as a functionating part of the body. The report of the London Clinical Society was decidedly of the opinion that the result was less useful, and I must confess that my results after excision have not been satisfactory, even when treated with care, with rigid antisepsis, and with subsequent attention to fixation of the joint for one or two years. A large majority of cases, six months after leaving the hospital, have been found to be suppurating. I speak of hospital cases, as, under proper care, operation is seldom necessitated in private practice.

It is sometimes argued that the most direful results obtained are those seen in the hands of the best hospital surgeons, which is undoubtedly true, from the fact that hospitals receive the very worst class of cases. Frequently the case when brought to the institution is already in the advanced stage of suppuration with involvement of both femur and innominate. Few dispensary out-patients can receive the close attention that is so essential to cure, and without it even ordinary measures will fail for want of attention to detail at the hands of ignorant mothers.

Yet, looking at hip disease in the light of present pathological knowledge as a local bone tuberculosis, the most rational method is to rid ourselves of the dangerous material if possible, before the general system becomes infected. Is it possible to do this? In the present state of our knowledge we must frankly answer we do not know. First, because we cannot be certain as to the exact number of foci that exist; and, secondly, we cannot fix the time at which general infection commences. We know that the most common point is near the epiphyseal line, but as to the rapidity of either local or systemic infection we have no certain knowledge.

The fact that pus has formed and has escaped from the capsule is sufficient cause for grave apprehension as to the result. But what course are we to pursue for its removal? While theoretically I am in favor of early operation, yet I am not prepared to advocate what is known as early excision. I abhor retained pus, and yet I have before my mind too many cases like the following:

A. B., aged eleven, female, with long, unmistakable signs of hip disease passing through its various stages; tumor appeared on the front of the thigh; by aspirations, in each of which operations seropurulent material was evacuated, and by the employment of rest and immobilization the symptoms became quiet, and the case was cured without appearance of pus, at least on the surface, and has been walking about in perfect health for eight years.

C. D., a case in which localized swelling was so great that I was called in consultation to open an abscesss. Undoubtedly hip disease in acute stage, yet, under proper treatment, after eighteen months shows no signs of suppuration, and bids fair to recover without loss of joint motion.

Such cases cause one to hesitate when the symptoms are not very serious, and the surgeon, in all these doubtful cases, should go carefully over the whole ground, taking into consideration, in connection with the local symptoms, the surroundings of the patient, the general condition of health, and the ravages of the disease.

On the other hand, I can recall many cases which were making favorable progress, yet suppuration has suddenly appeared, and the patient has died from long-continued drain, or from lardaceous degeneration, or from tuberculosis. Others, where operation has been refused, have taken the same course. In cases where there are reasonable signs of pus formation, and yet where the existence of abscess is not positive, even though thickening and induration are markedly present, we can often afford to wait until the diagnosis is more thoroughly established, feeling confident that injury to the general health is no more likely to occur than after operation.

Incision, erasion, and drainage, as described in a later portion of this paper, sometimes offer better hope of relief than excision, on account of the thorough removal of all portions of the tuberculous material, both of hard and of soft parts; but I have not practised this plan of complete erasion for a sufficient time to speak emphatically in regard to its value, as it will require several hundred cases to yield reliable facts. In theory it is correct, and it has sometimes given me excellent results. I cannot boast of such apparently brilliant successes as have been reported by Barker (*British Medical Journal*, Dec. 15, 1888, p. 1336), yet a close examination reveals the fact that months later his cases showed evidence of continuation of the disease, even though prompt healing had taken place.

I look upon all pus confined in the body as an element of danger, and upon tuberculous material as especially fraught with risk. I do not overlook the fact that our very efforts at removal of this tuberculous material may be the means of causing bacillary infection, and that we may hasten general tuberculosis. Partial removal is dangerous. Neither do I overlook the fact that encapsulation, caseation, absorption, or organization of the tuberculous foci may occur; hence, we should always have good ground for interference before attempting operative relief. On the other hand, such foci may be a menace to the constitution for many years. The strongest argument against thorough removal and rigid extirpation of the diseased tissue is the fact that Volkmann, who followed this plan for many years, was disappointed in the results. After reëxamination of his cases he found that relapses were not uncommon. In this respect he seems to have had similar results to those secured by the rest of us.

The principal measures practised for the relief of the various stages of hip disease are:

I. Aspiration of the fluid in the joint.
II. Ignipuncture.
III. Trephining or drilling.
IV. Aspiration of abscesses more or less remote from the joint.
V. Incision of the abscess.
VI. Incision, erasion, and drainage.
VII. Excision.
VIII. Amputation.
IX. Osteotomy.

I. *Aspiration of the joint fluid.*—While thoroughly of the belief that the overwhelming majority of cases of chronic hip disease are evidences of tubercular ostitis, caused by slight injury, there are a certain number of instances of primary synovial inflammation that require treatment in order to prevent the degeneration from involving the bone structure and then becoming tuberculous. The surgeon who does not treat cases that are diagnosed as "contusion of the hip" with this possibility in view, is not only reprehensible for his carelessness but is committing an injury to his patient. The progress of a majority of these cases is hopeful. Distention of the joint by serum will necessarily produce flexion, abduction, and external rotation, and to employ traction in a straight line, without removal of the fluid, provokes muscular spasms and produces pain. If the removal of the fluid is contra-indicated or declined, traction and fixation in the line of the deformity are permissible. Should rest, or traction, or both, produce no relief within a few days, then, with a clean instrument, clean hands, and clean integument, no harm can result from aspiration. When there are evidences of increased thickening about the joint, indicating that the fluid has degenerated into pus, removal of the articular contents is advisable. The joint may be reached posteriorly or anteriorly. I prefer the former route, but am guided by the proximity of the swelling to the surface. The amount of fluid is limited unless the capsule is ruptured. Great benefit will ensue provided rest of the joint follows, and instructions are strictly followed for a long time after all apparent symptoms have passed away.

II. *Ignipuncture.*—This, as practised by Park, Bradford, and others, consists in electrical tunnelling of the bone or cautery by electricity. It is occasionally valuable and would often be of more service if we could be assured of the correct situation of the tuberculous focus. Uncertainty upon this point, however, will, for the present, at least, permit it to be only occasionally employed. The puncture is usually made over the trochanter, and the cautery is caused to enter the longitudinal axis of the neck of

the bone until the epiphyseal juncture is reached. Good drainage is thereby secured. If all bacilli could be destroyed a rapid cure would result. It will require further tests before it is recognized as an established procedure.

The actual cautery may, I suspect, in the olden time, have sometimes been buried in the bone by Pott, Brodie, and others. This method, which we now so greatly decry, secured to the patient a long period of enforced rest from which benefit was derived, and thus the agent became a large factor in the cure.

III. *Trephining and drilling.*—From this plan of operation much benefit would doubtless be obtained, if, as in the last-mentioned plan, we could locate the exact position of the tuberculous focus. Unfortunately, however, this is usually impossible. Lovett states that much relief can be obtained by the evacuation of the products of inflammation by this method. He cut a ¼ inch hole through the neck of the femur with a trephine, and curetted and drained thoroughly from the bottom of the cavity. The temperature in his case ran up to 104.5°, but he states that cure was facilitated. It seems to me that cases requiring ignipuncture and trephining would be better treated by exploratory incision followed, if necessary, by drainage or by erasion.

IV. *Aspiration of the abscess.*—As long as there is the slightest doubt as to the existence of pus we can well afford to delay, even though confined pus is an element of danger. Many surgeons advocate the plan of letting these abscesses absolutely alone, and statistics prove that the danger to the constitution is not thereby greatly increased.

An important element in the diagnosis is the use of the aspirator. Thorough antisepsis must be employed, and it must be certain that no element of suppuration is introduced by the operator. A needle of large size should be employed, and if the fluid secured is sero-purulent in its character, or if we have the liquefaction of caseation, I have found that it is wiser to continue this plan of operative procedure as rapidly as the abscess becomes filled. In many cases absorption or organization has occurred, and the case has gone on to excellent cure without any pus finding its way to the surface. When the instrument reveals true pus one of the following plans of treatment must be instituted, unless the let-alone policy is decided upon. If it is decided simply to evacuate the pus without any more thorough operation, I decidedly prefer the preliminary plan of drawing it off through a large aspirator and injecting into the cavity ten or fifteen grains of iodoform dissolved in glycerin and distilled water. This should be allowed to remain, the object being to excite just sufficient inflammation to strengthen and thicken the walls of the abscess, which is nature's method of protecting the system from injurious invasion.

V. *Simple incision of abscess.*—When pus is absolutely proven to be present the question of its evacuation becomes an important one. So long as the doughiness of the part indicates only caseation, the waiting policy has, in my hands, given the best results. In the stage of liquefaction of caseation aspiration or simple incision is useful, as these cases often show but little tendency to suppuration. With many surgeons the existence of caseation is regarded as the signal for incision, but I have found that many of these cases do remarkably well without serious operation. As a rule, I prefer to abstain from any interference until I am positive as to my plan of final action, or until the consent of the patient has been secured to the necessary operative procedure. Should the major operation be declined, or if there are any contra-indicating symptoms, simple incision and drainage are most desirable, under strict antiseptic precautions. I have already described how preliminary aspiration should be performed in order to diminish the risk from bacillary infection. The incision should be made at the point of the tumor which will give the greatest drainage; frequently it is desirable to make two openings so that "through-and-through" drainage may be secured. In all cases of simple incision of abscesses, it is my chief object to avoid any pressure upon the abscess wall lest fissure occur and bacillary infection follow through this route. The contents of the abscess should never be pressed out, but should be removed by a gentle current of hot sublimate solution until the major portion of its contents has been evacuated. A bulky antiseptic dressing should be applied without undue pressure, and it should be allowed to remain until signs of decomposition appear, be it days or weeks. Disturbance of an abscess is as injurious as is the opening of a fresh wound. A drainage tube should be inserted at the time of the operation. Subsequently, antiseptic washing may be practised according to the view of the operator. So long as there is no pocketing of the pus I prefer to let it escape by free drainage rather than by forcible pressure.

VI. *Exploratory incision, erasion and drainage.*—There is no special form of incision which should be followed, even when it is probable that the operation will end in excision. If the abscess has not yet opened the most dependent portion of the prominence may be selected, avoiding the large vessels and nerves, and also paying attention to the integrity of the muscular fibres as far as possible. If sinuses exist, two or more of them may be connected, or the more prominent ones may be followed to the diseased bone. The bleeding vessels should be secured by forceps and irrigation by hot sublimate solution (1-1000) instituted so as to form a protective layer of coagulated albumin upon the freshly cut surface, thus assisting in the prevention of tuber-

culous infection. Thorough exploration by the finger and probe will then disclose the origin of the pus. The joint will usually be found open; if so, no harm will arise from enlarging the wound sufficiently to admit the finger and thus determining whether the disease is limited to a small area. If the disease is localized the scoop is now brought into use and every particle of diseased tissue that can be reached either in the head or neck, or synovial membrane, or in the acetabulum, or in surrounding soft tissues, is cut away. For this purpose I prefer a hollow-handled sharp spoon, as it enables me to work more rapidly, and at the same time it supplies a constant current of antiseptic water, and thus destroys all germs before they have an opportunity to infect the incision. As shown in the cut, it is simply a sharp spoon, with a bulky handle tunnelled longitudinally with a large ($\frac{3}{16}$ inch) bore so as to allow free ingress of water from the feeding tube which is connected with a reservoir, or jar, or rubber bag. The device of Barker for shutting off the flow of water is entirely unnecessary and is cleansed with difficulty. The carpal portion of the operator's hand makes an efficient valve and is easily employed for the arrest of the current when necessary. The length of the tube and the height of the jar, or fountain syringe, must be varied according to the rapidity of the flow desired. This hollow instrument gives the operator control of the current and leaves him free from the presence of an assistant's hand.

The erasion must be carried well beyond the seat of the disease, and for this purpose a curved gouge is sometimes necessary. If the head or other portion of the bone is loose, the rough ends must be sawed or gnawed off by strong rongeurs, and all fresh foci discovered in the bone similarly treated. The knife and scissors are then brought into use and all possible fragments of the diseased tissue entirely cut away. All sinuses should be opened, if possible, and the entire walls together with that of all abscess cavities, should be removed until healthy tissues are reached. After rendering the wound thoroughly aseptic we may permit it to fill with fresh blood-clot for reorganization or dress it clean and dry. The wound can be drained with catgut or rubber tubing, according as is deemed best by the operator. In the majority of cases I regard it as far more important to effect a thorough cure than to secure primary union. Rubber drainage is, therefore, preferable, especially when there has been extensive bone disease, as it counteracts any error that is liable to occur even with the most careful antisepsis. If these tubes are withdrawn half an inch at every dressing it will accelerate the healing and will lead the pus down their track. They are usually retained too long. A large antiseptic dressing should be immediately applied, firm pressure being made over antiseptic wool.

In the discussion upon this method, which developed in the Royal Medical and Chirurgical Society (*British Medical Journal*, December 15, 1888), absolute antisepsis, subsequent attention, and absolute rest were insisted upon. The anterior incision of Hueter for erasion was recommended, although thorough removal and drainage were more difficult. Wright, who has excised 135 times in his last 800 cases, thought it impossible to remove all the diseased tissue, and as a single focus remaining might, on slight traumatism, arouse inflammation and bring on a relapse, he still believed in drainage rather than to attempt primary closure. It is certainly impossible to secure a clean, fresh wound in every portion where there has been a large amount of disease and extensive suppuration.

The temperature chart is the most valuable index of the accumulation of pus, and every rise of temperature should be followed by a careful examination of the region.

VII. *Excision.*[1]—When an exploratory incision reveals a large portion of diseased bone, and when it is impossible to remove the foci by erasion, then excision should be performed. Enough has been said, in an earlier portion of this paper, to show that excision should not become a routine practice even in bad cases of hip disease, as has been the custom with many surgeons in late years.

Excision is an operation of exceedingly great value in selected cases, but it should be performed only with the full consideration of all the surroundings of the individual case. As to early excision, reasons for its avoidance have already been given. As to the line of incision, we may be governed by the location of the sinuses, but should be controlled more by the avoidance of the muscular and nerve fibres than by any fixed line, although I prefer the curved incision passing behind the great trochanter from the posterior iliac spine. If the anterior incision is preferred, it may be commenced just below the anterior superior spinous process with the tensor vaginæ femoris and gluteus on the outside, the sar-

[1] Dr. Willard said that as the question of excision would be discussed by another member of the Association, he would not enter into details regarding it.—ED.

torius and rectus on the inside, cutting directly downward upon the front of the capsule.

It is well to save all healthy periosteum, but this membrane when diseased should be thoroughly removed, as should any other disintegrated tissue. While excision should be thorough, it is not necessary that the trochanter, when healthy, should be sacrificed merely for the sake of drainage, as we can secure drainage by carrying a tube directly backward through the buttock, or in any convenient direction. Retention of the trochanter will add greatly to the future usefulness of the limb as well as to its length, as a short, slightly movable band of union is most useful. A narrow saw with a stout handle, similar to that of the Adams saw, with a longer cutting-blade, is usually much more convenient than a chain-saw. The soft parts can be protected from injury by retractors. For very deep work, where the ordinary chain-saw is certain to break during the operation, I have had a chain-saw made of the size and weight of an ordinary écraseur. This is much better fitted for heavy work, but is not equal to the straight saw for superficial work.

When osteomyelitis is present in the head and shaft of the femur, care should be taken not to strip the periosteum from a larger area of the bone than is necessary in removal. When the disease has extended far down the shaft of the femur the foci can be removed by erasion, especially in cases where to clear away all the disease would necessitate the removal of three or four inches. The result of entire removal in such a case would be to leave a "flail" limb, and amputation would be preferable save for appearance. It is also best in these cases to perform erasion if a secondary operation becomes necessary.

The dressing after excision which I find most convenient and comfortable, is simply light extension by adhesive strips and cord passing over a pulley, with heavy sand-bags applied to either side of the body from the axillæ to the feet. A wire cuirass is convenient and useful in cases where early transportation is required. The patient rarely suffers much pain.

In excision, as in erasion, all diseased tissues should be cut away, and the acetabulum cleaned as freely as possible, the gouge and scoop being brought into use. Drainage should be thorough and complete, but the tube should not be retained longer than is necessary to form a track for any deleterious material that may remain in the wound. Thorough antisepsis promotes rapid healing, but in excision, as in erasion, any remaining diseased foci will cause subsequent abscess.

When indications of commencing waxy changes make their appearance excision is certainly desirable in order to check the drain upon the constitution. Sometimes, even when these changes are marked, although the immediate risks from the operation are great, yet life has been prolonged by removal of the diseased foci. I have recently seen a case where excision had been performed several years since, yet where suppuration had continued and gouging had been practised three times upon the patient with a continuance of the suppuration after each operation. The kidneys, liver, and spleen showed most extensive changes, and yet the patient rapidly improved, gained flesh and strength, and was nearly freed from the discharge of pus from at least a dozen sinuses by a three months' residence at the seashore. This case evidences the effect which the bodily condition has upon the inroads of disease when the system is placed under good resistive influences, and well illustrates the fact that the tubercle bacillus can be destroyed by the individual.

By rapidity of operation, incision of moderate length, sawing the bone with a narrow saw while in position and without much disturbance of the parts, by prompt arrest of hæmorrhage by the use of hæmostatic forceps, and by extra care in all the details of the operation, the shock is greatly lessened and the seriousness of these operations has been greatly diminished in recent years. The condition of the patient has also been greatly benefited by the lessened drain upon the system through antisepsis, and he is thus made better able to cope with the tendency to relapse.

The necessity for excision, as for erasion, is greatly diminished by proper attention to rest and fixation. After the operation the weight of the body should not be put upon the bone for many months, and the diseased region should be thoroughly protected from injury by some form of apparatus for at least a year after entire recovery has taken place.

Frequently, when an exploratory incision has been made with the idea of removing the diseased portion by erasion, excision will be the final result of the operation. It is not expected that erasion can take the place of excision. It is simply to be employed where the destruction of the bone tissue has been small.

VIII. *Amputation.*—While amputation has been very serviceable in joints other than the hip, yet at this articulation, although sometimes employed, it is rarely of service, since cases necessitating so serious a loss of tissue are usually accompanied by caries of the ilium and the removal of the limb would be of only slight service save in arresting the drain. It has, however, been occasionally performed, and when osteomyelitis involving a large portion of the head of the femur is present, it would be decidedly preferable. Since Ferguson's advocacy of excision, in 1850, amputation has decidedly (and very properly) fallen into disuse, as the more conservative operation is usually of great benefit and is less

fatal. As excisions have lessened the number of amputations, so erasion will, in the future, lessen the number of excisions.

IX. *Osteotomy.*—Osteotomy is an operation to be performed only after the subsidence of all active inflammatory symptoms, and need not, therefore, be discussed in this paper.

Conclusions.—I. Mechanical measures, which enforce strict and long-continued rest of the joint, are the best preventives of operative procedures, and when they can be employed, as in private practice, operation is seldom necessary, since even if caseation or liquefaction occurs, we may often have absorption or encapsulation. Give careful attention to hygiene and general health.

II. Antiseptic aspiration of the joint is desirable if it is distended with serum, sometimes when it is filled with pus.

III. Ignipuncture and trephining give great relief, provided the focus of the disease is reached.

IV. If in doubt as to the presence of pus, wait, or test with aspirator. Repeat the aspiration if the fluid drawn is sero-purulent, since organization may occur without the opening of a sinus. If there are no signs of caseation, wait. If caseation takes place, make early exploratory incision. These latter cases are often curable by simple incision and drainage.

V. When certain that true pus has formed, aspirate and inject with iodoform in order to strengthen the walls of the abscess cavity as a preliminary to incision, provided incision alone is decided upon.

VI. If the abscess is to be only opened and no other operation performed, as soon as the sac refills after aspiration incise freely, wash out the contents with a slow current of (1-1000) hot sublimate solution, but on no account apply pressure to expel the pus, lest fissures be made in the limiting wall and infection be thus favored. Drain freely. Dress antiseptically and fix the hip. Continue to keep it at rest until closure occurs, or until further steps are necessary.

VII. When extirpation has been decided upon make an exploratory incision either along the line of a sinus or directly upon the bone, anteriorly or posteriorly, as preferred, and thoroughly examine the joint. If the destruction of tissue is small, try erasion and remove the carious bone and soft tissues with scoop, scissors, and knife. Endeavor to remove every particle of tuberculous tissue of both hard and soft parts including the abscess wall. Irrigate thoroughly with a strong antiseptic to prevent bacillary infection of the freshly cut tissue and drain freely. With antisepsis the dangers of opening the joint are only slight, and the desirability of operation is now based largely upon the question of time and the ultimate results as regards usefulness of the limb. In children it is especially desirable.

VIII. Perform a formal excision, not as a routine practice, but when the disease is found to be too extensive to be removed in any other way. In adults, especially when poor, a typical resection gives the best results. In cases of great destruction of bone, in painful caries sicca, in profusely suppurating cases, in the early stage of commencing waxy changes, the operation becomes one of special value.

Erasion differs from excision chiefly in the fact that in the former operation all diseased tissues (soft and hard) are removed and all healthy ones are spared. It is also less mutilatory. In excision a considerable portion of the good bone is sacrificed, but erasion is, of course, not as beneficial at the hip-joint as at the knee.

1818 Chestnut Street.

CLINICAL MEMORANDA.

TOXICOLOGICAL.

Hallucinations from Atropine Instillations in the Eye.—Some time since, J. B., a man of about twenty-five years, presented himself at the Presbyterian Eye and Ear Hospital, Baltimore, for treatment of a central corneal opacity of the left eye which greatly obstructed vision. An iridectomy was thought advisable, and was performed on Friday afternoon. Being the resident physician of the institution at the time, I had charge of the patient, and instilled one drop of atropine solution (4 grains to 1 ounce) in the eye three times daily. On the following Sunday, after the seventh instillation during a period of about forty-eight hours, he acted and talked strangely to the inmates of the hospital. On making my rounds that evening I found him somewhat excited. He gave foolish replies to questions, his face was flushed, pulse rapid, and the pupil of right eye was widely dilated. I discontinued the use of atropine, but did not deem an antidote necessary. About one o'clock that night, however, I was aroused by the nurse, who said she thought the man was crazy. Upon going to his room I found him dressed in overcoat, boots and hat, and crying like a child. He said that he had just seen a man split his father's head open with a broad-axe. I told him he was mistaken, and induced him to retire. After ⅙ grain of morphine, he quieted down and slept until morning. He was somewhat "flighty" during that day, but afterward was rational. Such effects are not uncommon when the atropine is instilled at intervals of an hour or two, but are extremely rare when it is used only three times during the twenty-four hours.

E. Oliver Belt, M.D.

Washington, D. C.

GYNECOLOGICAL.

A Case of Hæmatoma of the Cervix Uteri.—Dr. J. P. Salb was recently called in consultation to see a woman, twenty-four years old, who was in labor with her second child. On examination, the doctor found a wine-colored, flattish, ragged tumor projecting five inches beyond the vulva. It was irregular, resistant, apparently torn, and bled quite freely, and resembled a placenta. The child

was presenting by the face, the chin being rotated backward. Forceps were applied, and the child delivered. After the delivery of the placenta it was found that the finger could not be passed between the tumor and the internal surface of the uterus, and that the growth was continuous with the neck of the uterus.

The following day I saw the case in consultation. The tumor was then of large size, resistant, very dark, and apparently threatened with gangrene, and causing one of the most sickening odors I ever came across. The ragged ends apparently belonged to the posterior lip of the cervix, and just above them there seemed to be a rounded opening which had the appearance of a greatly enlarged os uteri.

I concluded that the tumor was either a sarcoma or hæmatoma, probably the latter, on account of the history of the case. She was a young woman, she had been in good health up to the labor, and had had no previous discharge, pain on intercourse, or other symptom of disease. The tumor was first noticed after the labor had been in progress for several hours, and was probably caused by the faulty position of the child.

As the posterior part of the neck was evidently already amputated, we concluded to complete the operation by amputating the anterior part of the cervix. The tumor was becoming gangrenous, it bled freely, and there seemed to be no other way of checking the hæmorrhage. Accordingly the woman was placed on a table in the lithotomy position, with an oil-cloth to drain off the liquids, and, the limbs being supported by assistants, the tumor was drawn out of the vulva as far as possible. The vagina was then thoroughly irrigated with hot carbolized water, by means of a fountain syringe. A stout double ligature was drawn through the tumor just above the dark part, and each portion tied separately. Another ligature was then thrown around the growth and tied very tightly. The mass was then cut off with scissors curved on the flat. The posterior part of the cervix could now be very plainly seen. It was ragged, dark, and slightly swollen. It did not bleed, and we concluded to let it remain. The vagina was again well washed. The woman was given a dose of morphine and put to bed. We did not give her an anæsthetic, and she did not suffer much pain during the operation. Vaginal irrigations were used daily.

The patient made an uninterrupted recovery without an untoward symptom. The sloughing stump came away about a week after the operation.

The accident seems to be a rare one, judging from the literature at my command. I am convinced that the hæmatoma was caused by the faulty presentation, the head pressing for hours against an undilatable os uteri, and at last bursting through the obstruction, the greatest pressure being on the posterior part of the cervix.

E. J. KEMPF, M.D.

JASPER, IND.

MEDICAL PROGRESS.

The Treatment of Burns.—In the *Norwiny Lekarskie*, No. 9, 1889, DR. LEON SZUMAN describes his method of treating burns as follows: as soon as possible after the injury the burned surface is covered with the following ointment:

℞.—Vaseline . . .	7½ drachms.
Pulverized salicylic acid.	15 to 30 grains.
Cocaine hydrochlorate .	2 to 4 " —M.

Over this he places a thick layer of iodoform or salicylic gauze, a thin layer of salicylic cotton, and a bandage. In burns around the mouth where the dressings become soiled they may be changed several times a day if necessary, while on the limbs or other regions they may be left undisturbed for several days. If the injured surface is contaminated with sand, mud, etc., it is washed with Carron oil before applying the ointment. The oil may also be used to soak the dressing if pain is severe. On changing the dressing if any portion of the gauze is found adherent to the surface it should be left *in situ*. Under this treatment severe and extensive burns are said to heal rapidly and without suppuration.—*Provincial Medical Journal*, March 1, 1890.

Prescription for Chapped Hands.—The following prescription for chapped hands is quoted in the *Provincial Medical Journal:*

℞.—Menthol	15 grains.
Salol, Olive oil } of each . .	½ drachm.
Lanolin	1½ ounce.—M.

The pain is said to be alleviated after the first application of this ointment, the skin at the same time becoming soft and fissures healing rapidly.

Calcium Iodate as an Antiseptic.—MR. W. DINNETT SPANTON has been experimenting for some years with iodate of calcium and believes that the salt possesses powerful antiseptic properties (*Provincial Medical Journal*, March 1, 1890). A bottle of urine, to which was added a small quantity of the iodate, has been standing for seventeen years and shows no traces of putridity. Another bottle containing boiled meat is also free from odor, excepting that of iodine.

Mr. Spanton has employed it internally and in solution for washing out the bladder in several cases of cystitis with very offensive urine. It had the result of greatly diminishing the fœtor and clearing the urine, though the author considers it inferior to boric acid for this purpose.

As a dressing for wounds, either recent or suppurating, it is certainly useful as an antiseptic. In such cases its insolubility is the greatest disadvantage, as it requires 400 parts of water to dissolve. In a case of excision of the tongue a solution of the iodate made an excellent mouth wash, absolutely preventing the fœtor so common after such operations.

Given internally the author has noticed no effects other than checking the decomposition of the urine in cystitis and reducing the amount of urates. So far as his experience goes he has found the insolubility of the salt its greatest disadvantage, but its innocuous and unirritating properties and its marked effect on the urine render it useful in cystitis, nephritic abscess, and to disinfect the urine previous to operations on the kidney or bladder.

It is important that the iodide of calcium be not mistaken for the iodate. The former is poisonous, and in comparatively small doses will produce disagreeable

effects. Unfortunately, the author does not state in his paper the exact amount of the iodate used internally in any of his cases.

The Treatment of Asthma.—At the beginning of an attack of asthma, DIEULAFOY directs the patient to paint the nasal cavities as high as possible, by means of a camel's-hair brush dipped in a five per cent. solution of cocaine hydrochlorate. If preferred, the solution may be sprayed into the nose and throat. If this application does not cause the attack to abort, the patient should be made to inhale from 1 to 12 drops of pyrodin, sprinkled on a handkerchief. When the attack is at its acme, inject hypodermically $\frac{1}{10}$ grain of hydrochlorate of cocaine, and repeat in a quarter of an hour, if necessary. The remedy *par excellence* for asthma is iodide of potassium, given in doses of 20 to 30 grains daily, but commencing with 5 grains only, and gradually increasing. To combat the diathesis, the author considers three principal medicaments: iodide of potassium, belladonna, and arsenic, and recommends the following course of treatment: The patient to take from 15 to 30 grains of iodide daily for fifteen days, then replace the iodide by pills containing powdered belladonna leaves and extract of belladonna, of each 4 grains, to be made into 20 pills. At the same time he is to take a teaspoonful daily of the following solution, after the principal meal:

℞.—Arseniate of sodium . . .	1 grain.
Distilled water	2½ fl. ounces.

If the chest be emphysematous, the use of baths of compressed air are also useful concurrently with the foregoing treatment.—*London Medical Recorder*, February 20, 1890.

The Treatment of Prolapse of the Rectum.—MR. FREDERICK TREVES summarizes the various methods employed for the treatment of prolapse of the rectum, as follows:

1. Subcutaneous injections into the ischio-rectal fossa. The fluids employed consist of solutions of ergotin, nux vomica, or carbolic acid. Vidal claims three cases of cure by the use of ergotin. In one of these no less than twenty-two injections were employed. The procedure would appear to be followed by severe pain and spasms of the sphincter, and to be uncertain in its results and tedious in its employment. It can scarcely be considered to be founded upon sound scientific principles, or to be a measure devoid of reasonable risk. At least one fatal case of poisoning is reported to have followed the injection of nux vomica.

2. The application of nitric acid. This measure aims at promoting cure by producing such a cicatrix as will cause the complete contraction of the mucous membrane. It seeks also to promote adhesion between the coats of the disorganized bowel. The method may be spoken of as little less than barbarous, and as representing a survival of an evil period in the surgery of the past. The operation involves extreme pain, and is apt to produce extensive sloughing and severe inflammation of the rectum. It has been followed by fatal hæmorrhage, and by stricture of the lower part of the bowel. The after-treatment is not infrequently protracted. Mr. Harrison Cripps mentions a case in which apparent cure followed three applications of nitric acid, the period of treatment extending over four months.

3. The application of the actual cautery to the mucous membrane of the prolapse, or the removal of linear folds of the membrane by means of the clamp and cautery, are measures which are little superior to that just described. The treatment is painful, a severe degree of inflammation is excited, sloughing is inevitable, the special dangers of a burn are introduced, and more or less cicatrization is unavoidable. During the use of the clamp and cautery the weakened bowel has given way, and coils of small intestine have escaped.

Of all these methods it may be said that they are clumsy, uncouth, uncertain, and unsafe; that they are not in accord with the teachings of modern surgery; that they offer the least satisfactory mode of dealing with the affection, involve a protracted and painful period of treatment, and incur unnecessary risks. By excising the part a clean incision is substituted for a burnt and gangrenous surface, the operation area is reduced to a minimum, no damaged bowel is left in the pelvis, hæmorrhage may be rendered practically impossible, and the risk of a subsequent stricture can hardly be said to exist. The method is simple and final, it involves no protracted period of after-treatment, it induces but little pain, it leaves a simple wound which is open to inspection, and it appears to offer the best claims for being considered a method of "radical cure." Kleberg's method of removing a prolapse by means of elastic ligatures, aided by the liberal application of chloride of zinc, is a needlessly severe, complicated, and dangerous operation, which does not appear to have been adopted by any other than the inventor. It would seem that in three cases treated by this method two patients made a tardy recovery, and one died.—*Lancet*, March 1, 1890.

Prescription for Gonorrhœa.—JULLIEN recommends the following injection in gonorrhœa:

℞.—Liquid vaseline . . .	140 parts.
Bismuth subnitrate . . .	10 "
Resorcin	3 "
Iodol	1 part.—M.

—*Revue de Thérapeutique*, March 15, 1890.

Cardiac Affections of the Menopause.—PROFESSOR KISCH (*Berliner klinische Wochenschrift*) has noticed that in the beginning of the climacteric, when menstruation is becoming irregular, although the heart has hitherto been normal, women often complain of attacks of palpitation with or without apparent cause, lasting some minutes, and recurring after several days. The feeling of increased heart-beat is very troublesome, and is accompanied by a sense of anxiety and of pressure in the chest, throbbing of the carotids, pulsation of the abdominal aorta, with rushing of blood to the head, occasional muscæ volitantes, noises in the ears, giddiness, and even fainting. Objectively, the cardiac action is found to be increased, with frequency of the pulse from 120 to 150, which is usually strong, well filled, and regular. The heart-sounds are normal. There is no appearance of anæmia; on the contrary, the patient looks well nourished, strong, and full-blooded. The systematic use of mild purgatives is indicated, with dietetic treatment in the shape of bland

food, while much improvement may result from active bodily movement, cold bathing, and moist applications to the abdomen. Another form of heart trouble associated with the change of life has the symptoms of cardiac weakness. It occurs usually in delicate women, who have suffered from chlorosis in youth, and from anæmia later on; or in cases where the climacteric sets in with profuse menorrhagia, or in women who have formerly suffered much from menorrhagia or have borne many children. In these cases the frequency of the pulse is not so high as in other forms, though the pulse is weak, small, easily compressible, and sometimes intermittent or irregular. Dyspnœa and attacks of cardiac asthma occur, sometimes with angina. Congestive appearances may be present, such as sudden chilling of hands and feet, often with œdema of the ankles; and sometimes there is albumin in the urine. It is very important in these cases to ascertain the condition of the pelvic organs. A third group arises from the tendency of fat to find its way into the heart as part of a general deposit throughout the body.—*Practitioner*, March, 1890.

The Treatment of Phthisis by Carbonic Acid.—It is said that lime-burners enjoy a certain degree of immunity from phthisis, not because they take in more carbonic acid, but because its diffusion when expired is impeded. Again, the course of phthisis is often seen to be arrested in pregnancy, and this has been ascribed to the increased amount of carbonic acid in the maternal blood. Chronic heart disease, by causing chronic hyperæmia of the lungs, also affords a kind of immunity against phthisis; lastly, in emphysema there is also permanent dyspnœa in more or less degree, and the blood is overcharged with carbonic acid. Acting on these ideas, DR. HUGO WEBER (*Berliner klinische Wochenschrift*) proposes to administer carbonic acid by the stomach, in the form of effervescing powders. Ten cases are reported in which decided improvement was noted after this treatment, which certainly merits further trial, especially as it can be carried out at the patients' own homes. According to Ebstein's theory of diabetes, the increased proneness to phthisis which that disease entails is due to the defective development of carbonic acid, this being not only the final product of tissue oxidation, but a body which exerts a regulatory restraining influence on the destruction of glycogen and albuminoids. Bergeon, Dujardin-Beaumetz, and others have used in phthisis gaseous injections *per rectum* of hydrofluoric acid, copiously diluted with carbonic acid, and the good results they met with are claimed by Dr. Weber as due to the diluent. —*British Medical Journal*, March 8, 1890.

Medical Examinations for Life Insurance.—In the *Dublin Journal of Medical Science*, March, 1890, DR. A. W. FOOT contributes an article of great interest to examiners for insurance companies. Referring to the influence of apoplexy upon risks, the author writes that the apoplectic habit, in so far as it is characterized by broad chest and shoulders and a reddish face, is found absent in a majority of those who suffer from cerebral hæmorrhage, and he apparently thinks that these signs should not be taken into consideration; but it is important to bear in mind that apoplexy, or at least the tendency to arterial degeneration, is often inherited.

There is seldom any attention paid to the existence of a discharge from the external ear, yet such a symptom betokens incalculable dangers to life, and it is suggested that the applicant should invariably be questioned upon this point.

Erysipelas is also frequently neglected, yet it is well known that the disease is often associated with diminished vitality, with depraved digestion, and with defective assimilation, and that one attack predisposes to others.

Another matter which should not be overlooked, is the occurrence of fæcal obstruction, especially if originating near the right iliac fossa. The applicant, deeming it simple constipation, may not consider it worth mentioning; but such cases are liable to a recurrence of obstruction which may prove fatal.

With reference to phthisis the author insists on the importance of not overlooking the fact that, when many brothers or sisters of the applicant have died in infancy from diseases of the brain or of the abdominal organs, tuberculosis is probable, and the risk thereby increased. Further, it is a sound principle of action to reject a life when so many as two immediate relatives are admitted to have died of consumption. Applicants often try to cover up the existence of the disease by terming it "asthma," or "bronchitis," when careful inquiry will elicit the fact that the disease was undoubtedly phthisis. The examiner must also be on the watch for inherited tendencies to insanity, which in the family history are described as "nervous debility," "congestion of the brain," etc.

Many cases have occurred in which insurance companies have lost money, after a short period of insurance, by the examiner neglecting to investigate the rectum. Cancer of this organ in the early stages may be considered hæmorrhoids by the applicant.

The author then reviews the question of the influence of albuminuria on the risk, and concludes that, however small the quantity, unless clearly extra-renal, albumin in the urine should positively exclude an applicant from insurance.

While examining the urine, it should in all cases be tested for sugar regardless of the specific gravity. It is only by routine examination that the early stage of diabetes can be discovered, for at that time the amount of sugar is insufficient to raise the specific gravity to a marked degree.

Iodoform in Cerebro-spinal Meningitis.—DR. G. LEVITSKY in the *Vratch* has recently called attention to the excellent effects obtained in cerebro-spinal meningitis by the internal administration of iodoform, in doses of two grains three times daily. He reports the case of a woman suffering with an exceedingly severe form of the disease, in whom, after other means had failed, the administration of iodoform was immediately followed by steady improvement. On the third and fifth days of the treatment contractures disappeared from the right and left arm. By the end of the fourth week the patient was practically well, and the drug was discontinued. A relapse then occurred which yielded at once to iodoform, a complete and permanent recovery taking place. In all, one ounce of iodoform had been taken in the course of two months; no untoward effects of any kind being noticed.—*Journal of Nervous and Mental Diseases*, March, 1890.

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SATURDAY, APRIL 5, 1890.

THE PREVENTION OF OPHTHALMIA NEONATORUM.

THE statistics of Professor Magnus, of Breslau, carefully compiled for Europe, and Germany in particular, have demonstrated that 71.99 per cent. of all who become blind during the first year of life are rendered sightless by purulent ophthalmia; in other words, he has shown that of every 10,000 children under five years of age, 428 are blinded by this type of conjunctivitis. The proportion of blind from this cause in the asylums of Switzerland is 26 per cent.; in Austria, Hungary, and Italy, 20 per cent.; in Spain and Belgium, about 12 per cent.; and in the United Kingdom, 30 per cent. of the inmates of institutions, and 7000 persons have lost their sight from the same disease. These facts are recorded in the Report of the Royal Commission of the Blind, and are in accord with the abstract published in the *Lancet* of last year. The subject cannot be presented more forcibly than has been done by Rivière of Bordeaux, who says that purulent ophthalmia alone is responsible for nearly one-third of the cases of blindness, and has placed in the care of Europe well-nigh 100,000 victims. In our own country, according to the statistics of Howe, in spite of the improved methods of modern medicine, blindness is on the increase. Perhaps one of the most potent factors of this increase is ignorance on the part of the emigrant population, and the suggestion of the Royal Commission that at the time of the registration of the birth of a child a paper containing an account of the dangers of the disease and the best simple means of treatment be handed to the parents, deserves consideration. The plain duty of physicians demands the practice of that means of prevention which careful experience has taught to be effective.

To Crédé belongs the credit of having secured, by the use of nitrate of silver, a rational method of preventative treatment, although before his time Bischoff employed in his service at Basle vaginal injections, and bathed the eyes of the newborn with lotions of salicylic acid; and in 1876 Schies used instillations of carbolic acid. In 1881 Olshausen proposed to substitute for nitrate of silver a carbolic acid solution of the strength of 1 per cent. A year later de Wecker recommended bathing the eyes of the newly born with a lotion of boric acid, 4 to 100, or carbolic acid, 2 to 100. In the Obstetrical Clinic in Berlin, in 1883, nitrate of silver was replaced by instillations of corrosive sublimate, 1 to 1000, and the same practice was employed in the Maternity Hospital of Breslau. At the Congress of German Doctors held at Munich in 1886, Kaltenbach advocated vaginal douches of corrosive sublimate, and washing the eyes with distilled water; with this procedure he was able to conduct 200 labors without a single case of ophthalmia. Cohn and Hegar-Kohrn, by the employment of simple measures and scrupulous cleanliness, obtained good results in the Maternity Hospital in Dresden, namely, among 1000 children 7 cases of purulent ophthalmia, and 15 of slight conjunctivitis (*Archiv für Gynäkologie*, 1888). Puech (*Archiv de Tocologie des Maladies des Femmes et des Enfants Nouveau-nés*, Février, 1890) records the methods to which he has had recourse in the Obstetrical Clinic of Montpellier. His paper is of considerable interest because it affords an opportunity of comparing the value of the method of Crédé with that described and advocated by Hegar-Kohrn. Both of these methods were employed in the service to which allusion has just been made, and comparisons instituted. The method of Crédé, as is well known, consists in the instillation of two drops of a 2 per cent. solution of nitrate of silver in the eyes of the newly born child, which, as soon as it is expelled from the maternal passages, and before the cord is cut, is placed upon its back in the bed, the eyelids parted, and the drug introduced. This, in some

instances, has been repeated on the second day, in the meantime small compresses soaked in a solution of salicylic acid having been laid upon the closed lids.

The method of Hegar-Kohrn is conducted in the following manner: A convenient vessel contains small pledgets of antiseptic, absorbent cotton, moistened with Van Swieten's solution (corrosive sublimate 1 part, alcohol 100 parts, water 900 parts). This receptacle is placed within reach of the accoucheur, who supports the perineum with one hand, the other remaining free to take up the moistened pledgets. As soon as the head of the child is born, the closed eyelids are carefully dried with two or three portions of the prepared cotton. When the child is entirely expelled it is placed upon its back, and before the cord is tied the eyelids and all of the tissue surrounding them, especially the angles of the eye, the root of the nose, and the eyebrows, are carefully cleansed with the same solution until an absolutely aseptic surface is obtained. During this whole procedure care is taken that the child does not put its hand to its eyes before they have been cleansed in the bath which is prepared for the infant. This manœuvre, as Puech declares, requires a longer time for description than it does for its performance, and is always ended before the time has arrived to cut the cord.

Three series of observations constitute the basis for his communication. In the first, among fifty children treated alternately by the method of Crédé and by that of Hegar-Kohrn, two cases of ophthalmia appeared. The cause of the two cases, however, is explained away and the blame should not be attached to any imperfection in the preventive treatment. In the second, among twenty-six children treated by the method of Hegar-Kohrn, not a single case of ophthalmia arose; and in the third, nine children subjected to the method of Crédé escaped ophthalmia.

The efficacy of the method of Crédé admits of no controversy, and even those, like Kaltenbach, who have suggested other forms of prevention, admit without reserve that nitrate of silver properly applied meets with invariable success. Not infrequently it has been urged against the employment of this drug that its action is irritating, and that occasionally it is followed by a sharp conjunctivitis requiring the use of cold compresses, and one or two cases of really serious inflammation are on record, notably the remarkable instance recorded by Pomeroy some years ago, in which a well-nigh fatal hæmorrhage followed the instillation of a few drops of a 2 per cent. solution of nitrate of silver. The occasional accidents following the use of Crédé's method are so insignificant as compared with its favorable action, by which its author was able to reduce a percentage of 10.07 cases of ophthalmia to 0.1, a result which has been equalled and even exceeded by a number of careful obstetricians including the names of Koenigstein, Braun, Leopold, Garrigues, and Rivière, that they scarcely merit objection. At the same time if another method equally efficacious is presented for consideration, and one unobjectionable as far as any irritating properties of the application are concerned, it is certainly worthy of trial. Hegar-Kohrn has devised a method of this character, and Puech, by comparing it with the Crédé application, has come to the conclusion of its undoubted efficacy.

Purulent ophthalmia is caused by a contagium contained in the utero-vaginal secretions of the mother, and the very frequency of these secretions, whose absence, indeed, in the pregnant woman is the exception, demands on the part of the doctor invariable recourse to a preventive treatment of ophthalmia neonatorum. He knows that with Crédé's method he is safe, provided its application is properly and conscientiously performed. If desirous of avoiding any chance of irritation from the nitrate of silver application, or of adopting some other method, like that of Hegar-Kohrn, the final conclusion of Puech's paper, based, as it is, on a conscientious study of the literature, as well as practical experience in the maternity wards, offers a safe guide: "We believe the method of Crédé is still the chosen method, but the incontestable value of that of Hegar-Kohrn seems to us to be proven. We do not doubt that it will render real service. While the method of Crédé is applicable to maternity hospitals, or in the course of grave epidemics of ophthalmia, the method of Hegar-Kohrn will be that to which we can turn in private practice, where the chances of contagion are less imminent."

THE LOUISVILLE CATASTROPHE.

IN another column under the head of Special Telegraphic Correspondence, we publish a despatch from our correspondent in Louisville, detailing the medical aspects of the city after the storm. As will be seen from this account, the health of Louisville is at present fairly good, but it is worthy of note that the danger from epidemic and acute ill-

nesses exists rather in the future than in the present. This was the case at Johnstown, where, for many days after the flood, the health of the survivors and workmen was unusually good, the real evidences of illness only asserting themselves after order was somewhat restored. The most serious cause for alarm at Louisville is the destruction of the water works and the consequent water famine.

REVIEWS.

The Student's Surgery. A Multum in Parvo. By Frederick James Gant, F.R.C.S. 12mo., pp. 817. Philadelphia: Lea Brothers & Co., 1890.

In these days of compends and condensed medical literature it is refreshing to open a volume written for students, yet readable, and not divested of everything but the bald facts required to pass a successful examination.

The *Student's Surgery*, though condensed from Mr. Gant's well-known and elaborate *Science and Practice of Surgery*, is, excluding the various specialties, a fairly complete and excellent text-book on surgical practice. It is essentially practical; pathology and theories being briefly reviewed, diagnosis and treatment being fully discussed.

The author has omitted, and wisely we think, all consideration of the surgery of the eye, ear, teeth, skin, and female genital organs, and also orthopædic surgery; subjects which could only have been introduced in outline, and with the sacrifice of more important matter. It is doubtful if, at the present day, these departments should have a place in any text-book on surgery.

The faults of the book are chiefly those of omission. For instance, in the pathology of erysipelas, carbuncle, and tetanus, no mention is made of microörganisms as possible causative agents: a serious oversight in the present state of our knowledge.

The absence of an index is also to be regretted, though the table of contents is so thorough that an index is not an absolute necessity.

The illustrations, though not numerous, are good, and the appearance of the book is all that could be desired.

Massage and the Original Swedish Movements. By Kurre W. Ostrom. Illustrated, 12mo., pp. 97. Philadelphia: P. Blakiston, Son & Co., 1890.

It cannot be denied that massage occupies an important position in the therapeutics of many diseases; the Swedish movements, though less frequently used by physicians, are also a valuable method of treatment. Either, if ignorantly and improperly used, is capable of doing much harm to the patient, and it is the object of the book before us to describe the proper methods of performing the manipulations, and to indicate the cases to which they should be applied. The first object at least is well attained. The desciptions are clear, and so well supplemented by the illustrations, that any one with this book and a subject on which to practise, could undoubtedly become proficient in the art of massage. An excellent feature is the simple classification of the manipulations adopted by the author, which makes the whole subject much easier to grasp.

Turning to the section which deals with the diseases to which massage is applicable, we find traces of the specialist's enthusiasm. We doubt if "movements will yield good results in the majority of cases of chorea," nor do we believe that "most neuralgias yield readily to massage," though we know that, in both these diseases, massage is a useful adjunct to other measures. We naturally wonder if the author means *acute* rheumatism when he says that "active movements as well as hacking and beating of the affected parts are of great benefit in cases of rheumatism. In severe attacks the treatment should be applied twice daily (!). Ten to thirty treatments are generally sufficient to effect a cure." However, the work is intended chiefly to teach methods, and for this reason should be in the hands of all nurses and physicians who wish to use massage intelligently and with benefit to their patients.

Spinal Concussion. By S. V. Clevenger, M.D. With thirty wood engravings. Philadelphia and London: F. A. Davis, 1889.

Dr. Clevenger has placed before the profession a book of some three hundred odd pages followed by a glossary, containing words which are frequently used in the consideration of nervous diseases, and by plates which illustrate the motor points of the extremities, both upper and lower, as well as of the head and neck. While the book is one which consists in an accumulation of the writings of different individuals under one heading, the reader cannot fail to notice that the author has, to a certain extent, put his own stamp upon the work, and the handsome plates which are scattered between the pages show in a very useful way the points at which the different nerves leave the spinal column. Colored plates illustrate the anatomy of the spinal cord and of the tracts which it contains. The most interesting portion of the work consists in the chapter on differential diagnosis and that on "Recent Discussions of Spinal Concussion." That upon "The Treatment of Concussions" has of necessity to be quite short. To the medico-legal investigator the illustrative cases of spinal disease, which are made up of instances derived from personal observation and the observation of others, will be of value in that in this way the general symptoms shown by groups of cases are readily noted and understood. Altogether the book may be considered as one which in a comparatively small space has brought together a large amount of literature of a reliable character, and it is to be recommended to those who are apt to be called upon the witness stand to testify in regard to the results of injury in railroad and other accidents.

The publisher's work is very well done and the plates are excellent.

The Neuroses of the Genito-urinary System in the Male, with Sterility and Impotence. By Dr. R. Ultzmann. Translated by G. W. Allen, M.D. Philadelphia and London: F. A. Davis, 1889.

This book is to be highly recommended, owing to its clearness and brevity. It is illustrated wherever illustrations are necessary, and is divided into two portions, as indicated in its title, of which the portion on "Sterility

and Impotence" contains much matter which is of interest. Altogether, we do not know of any book of the same size which contains so much useful information in such a short space.

A TREATISE ON FRACTURES. By ARMAND DESPRIS. TRANSLATED BY E. P. HURD, M.D. Detroit, Mich.: George S. Davis, 1890.

THIS is one of the recent numbers of Mr. Davis's series, and embodies in a very small space the opinions and methods of its French author.

We confess to the belief that we have treatises upon fractures in plenty by Americans; but the publisher's wisdom is greater than that of the medical editor, and Mr. Davis evidently thinks such books profitable, so we have only to thank him for his business tact and foresight.

BY TELEGRAPH.

LOUISVILLE.

(*Special to* THE MEDICAL NEWS.)

To the Editor of THE MEDICAL NEWS,

SIR: The total number of persons killed by the tornado is ninety-six, wounded about two hundred. The injuries resulting fatally are, in the order of frequency, fractures of the skull, thoracic injuries from pressure, asphyxiation from gases, burns, and shock. But few of the wounded will die. As a comparatively small number of the poorer classes were among the injured the hospitals are not crowded, the City Hospital having but five cases, Sts. Mary and Elizabeth and Norton Infirmary having about fifty.

The water-works are so seriously damaged that repair is impossible for many days, and a water famine with its serious results is certain.

The hygienic condition of the city is now more influenced by the snow and rain than by the direct effects of the cyclone.

There are rather more zymotic diseases and pneumonia present than usual, but otherwise there is little of medical interest. No outside help is required.

CORRESPONDENCE.

MUNICH.

(*From our Special Correspondent.*)

To the Editor of THE MEDICAL NEWS,

SIR: The treatment of massage, first established by Thure Brandt, and afterward advocated successively by Profanter, Schultze, Resch, and v. Preuschen, is claiming here such a conspicuous place in the therapy of pelvic and uterine disorders that it may not be amiss to describe briefly the method and mention a few of the features which recommend it.

For example, in retro-positions, without adhesions, the so-called "lifting movement" is employed. The patient lies upon a couch with her knees drawn up and her feet together. The operator stands over her with one knee on the couch and places a hand, on either side, flat against the abdomen, the palms directed slightly toward each other. He presses his hands with gradually increasing force, first upward and together, then downward until he grasps the uterus and ligaments on either side. He slowly draws the uterus upward and forward, at the same time making an oscillating movement with his hands from side to side, gradually allowing the ligaments to slip from his grasp as they become stretched. This movement is repeated three times at one sitting. In addition, the patient is made to undergo a movement by means of which the muscles of the pelvic floor are strengthened. She lies in a half-recumbent position, with her thighs and legs extended and her knees separated; then, while she elevates her pelvis, she brings her knees slowly together. In retroflexions the "lifting movement" is modified as follows: The round ligaments and the peritoneum extending from the bladder to the uterus, forming the vesico-uterine ligament and containing abundant muscular fibres, are stretched by the operator forcing the fingers of the right hand inward over the symphysis, directly against the internal os, while, with the first and second fingers of the left hand introduced into the posterior fornix, he makes counter-pressure.

Brandt offers the following propositions as grounds for his treatment: 1st. The ligaments in positional disorders are relaxed and their muscular fibres are devoid of function. 2d. The support furnished by the floor of the pelvis is in proportion to the tone of the muscles. 3d. By stretching, the muscular fibres of the ligaments are excited to contraction and the uterus held in a normal degree of fixation. 4th. By massage, the pelvic circulation is augmented and function thereby restored.

Such a plan of treatment is difficult to pursue in an institution like the Frauenklinik, where so many cases are handled and where operative treatment for obvious reasons remains the most practicable. It has, however, been used with success, and Professor Winckel includes it in the discussion of the therapy of every case in which it is available.

Influenza attacking pregnant women at the Frauenklinik, presented, as a rule, no unfavorable complications in the course of pregnancy and labor. One case occurred, however, which is of interest on account of the unique combination of symptoms. The patient, suffering from influenza, was first presented in the klinik on January 7th, in the second stage of labor. On the 11th she was again brought before the class, when a history of gonorrhœa, for which she had been treated in the general hospital, was elicited, and the relation of condylomata acuminata, which appeared in profusion over the anterior vaginal wall, to gonorrhœa, was discussed. Two days later a papulo-erythematous eruption appeared over the abdomen and inside of the thighs, without an additional rise in temperature. It was diagnosed urticaria. The cough from which she had suffered now increased, and the temperature rose. Catarrhal pneumonia was diagnosed. Three days before her death, which occurred twelve days after labor, she complained of pain in the abdomen after coughing, but there was so little tympany, and the abdomen was so relaxed and free from tenderness, that the diagnosis of peritonitis was disregarded.

The section, performed nine hours after death by Professor Bollinger, revealed acute, diffuse peritonitis, pleuritis, catarrhal pneumonia with bronchiectasis and multiple abscesses. The uterus was soft and as large as the fist; the lymph spaces in the muscular tissue, here

and there, were dilated and filled with pus. The ligaments, tubes, and ovaries were covered with plaques of fibrin, their neighborhood evidently being the most active seat of inflammation. The tubes were filled with pus, in which, later, gonococci were found; the fimbriated extremities were permeable. During the autopsy the question arose whether the case was one of puerperal septicæmia with peritonitis, pleuritis by direct extension through the diaphragm and pyæmic abscesses in the lungs, or whether the peritonitis and catarrhal pneumonia were processes due to separate causes. The former view was held by Professor Bollinger; but, later, Winckel, in reviewing the case, established the diagnosis of peritonitis due to gonorrhœal salpingitis; the pneumonia being a continuation of the bronchitis, with bronchiectasis in the course of influenza. The appearance of the Fallopian tubes and their surroundings marked them as the starting-point of the pelvic peritonitis, which evidently had found its origin in the escape of pus from within the tubes by pressure during coughing—an *überfluss Peritonitis*.

An extremely interesting point is the occurrence of the eruption. After a thorough examination no evidences or history of syphilis were discovered, and the eruption was classed among the rarer symptoms of influenza; the report of similar cases from St. Petersburg, and elsewhere, gave a reasonable support to this hypothesis.

If space permitted, I should like to add a fuller description of a case of extra-uterine pregnancy in which Professor Winckel extracted piecemeal, through the dilated urethra, a fœtal skeleton which measured in length twenty-one centimetres. The fœtal sac had perforated into the bladder through the posterior wall near the vertex. The right femur projected into the bladder and was covered with incrustations. The perforation had been gradual and was not accompanied with any discharge of pus in the urine. In such cases Winckel tries, within the first three months, to interrupt the pregnancy by the injection into the sac through the abdominal wall, at intervals of from six to eight days, of 0.03 gm. of sulphate of morphine, two or three injections usually sufficing.

PARIS.

A New Disease of the Heart. Erysipelatous Pneumonia. Colotomy. Treatment of Club-foot.

To the Editor of THE MEDICAL NEWS.

SIR: At one of the last meetings of the Académie de Médecine, Professor Renaut, of Lyon, made an interesting communication on a new organic disease of the heart denominated chronic essential segmentary myocarditis. According to the author this affection presents a train of symptoms which easily differentiate it, at the bedside, from other cardiac diseases. From an anatomical point of view the disease is characterized by what might be called a segmentary dissociation of the muscular tissue of the heart.

This lesion consists in the softening of the cement substance uniting the cardiac muscular cells end to end. When this cement disappears, it is easy to understand that the fibres of the myocardium will no longer contract synchronously, or with sufficient force, and that cardiac asthenia must result.

This softening of the uniting cement is the only lesion found at the autopsy. The myocardium is in a flaccid condition, its color is gray, and the ventricle can be easily torn.

Histological examination reveals everywhere numerous patches of segmentary dissociation, either isolated or united together. Even where the dissociation is very limited, it is constantly and profusely present in the papillary muscle of the mitral valve.

The disease is most frequently observed in old people, and the first symptom is an irregularity of the heart's action not preceded by hypertrophy. This irregularity takes place without modifying the general characters of the normal pulse-tracing. In segmentary myocarditis, whatever may be the degree of the irregularity, the pulse never takes the form of the asystolic pulse of valvular diseases, nor becomes small, unequal, intermittent, or irregular.

Another important sign is the disappearance of the localized præcordial beat. The beat is diffused or totally absent, or impossible to localize.

The third physical sign is an area of flatness limited by four straight borders. The external border ascends from the fifth interspace vertically to the third interspace, always inside of the mammary line; the internal border goes from the sixth or seventh chondro-sternal articulation to the third interspace. Two transverse lines, one above, along the third interspace, the other below in the fifth, complete this typical rectangular flatness.

On auscultation, one finds a weakening of the normal sounds, and a greater or less irregularity of the cardiac rhythm. In a certain number of cases these signs exist alone, but sooner or later another sign makes its appearance, viz., the medio-cardiac systolic sound. It is a soft, very light sound, situated half way between the apex of the heart and the aortic valves, its maximum being about the middle of the heart; it is not transmitted down the sternum, nor toward the axilla. Another very important character of this murmur is its instability. It will disappear for very long periods, then return again.

The disease may terminate: 1st, by sudden death from syncope in about one-quarter of the cases; 2d, by asystole, which is the most frequent termination. Patients suffering from this disease die easily; a common cold or a traumatism may bring on, in an aged person, rapid death by asystole. The most important pathogenic condition for the development of this variety of myocarditis is senility; almost every old person having the disease to a greater or less degree. In persons of middle age, as possible determining causes, we find alcoholism, the eruptive fevers, and especially typhoid.

As regards treatment, increasing doses of the infusion of digitalis are given when arhythmia exists, or digitaline and champagne, and the patient is protected against bronchitis. In old people, if bronchitis is persistent, as this is probably due to fragmentary myocarditis, the heart tonics and regulators of the arterial circulation are to be prescribed. To digitalis the author adds ergot as a tonic for the vessels.

At one of the last meetings of the Académie de Médecine, Dr. Mosny presented a clear case of erysipelatous pneumonia, which occurred in a girl, who, while nursing a patient with facial erysipelas, was taken with pneumonia and died in two days. At the autopsy, a very limited

area of lung tissue presented the lesions of broncho-pneumonia, which was demonstrated by histological examination. On the other hand, bacteriological cultures showed characteristic colonies of the streptococcus of erysipelas without the presence of any other micro-organism.

Professor Laboullene, at the next meeting of the Académie, mentioned the fact of having observed erysipelas followed by a special form of pneumonia. Six persons were successively taken with pneumonia; this disease being at first localized, then extending to the whole lung of one side, finally extending to the opposite lung, and invariably ending in death. One of the patients, who had a well-established pneumonia, developed a facial erysipelas. There is no question that the contagious agent was the microörganism of erysipelas in every one of these cases.

At the Société de Chirurgie Dr. Kirmisson defended Dr. Phelps's (of New York) treatment of club-foot by section of the retracted muscles. Last year, Dr. Kirmisson performed this operation seven times in four children. The first case was a child four years old, who, by Phelps's tenotomy, has now a useful, though, perhaps, not a very well-formed foot. The second case had already been operated upon, the tendo-Achillis had been cut, and the patient had worn many different apparatuses; the result by the above method was perfect. The other two had been previously operated upon—excision of the astragalus had been performed in both cases with bad result; Phelps's method gave these patients good use of their feet. Volkmann has also used this method in twenty-one cases, with the best results.

On the other hand, Dr. Lucas Championnière, who is the antiseptic surgeon, *par excellence*, of Paris, advocates the removal of as much bony tissue as necessary to correct the deformity; he himself claims to have excised in one case the astragalus, scaphoid, part of the cuneiform, the cuboid, and calcaneum. Dr. Championnière adds that a large excision assists very much the union of the soft parts, and this rapid union plays an important *rôle* in the final success of the operation. Treated in such a manner, a patient is able to walk at the end of six weeks, at first wearing a boot with lateral splints, to prevent a sprain or lateral movements.

Professor Verneuil spoke before the Société de Chirurgie on iliac colotomy, and rapidly passed in review the different methods of operations recommended.

Dr. Verneuil usually operates as follows: 1st. The intestine is drawn out, so as to expose through the abdominal wound about two-thirds of the intestinal circumference. 2d. This exposed portion is temporarily transfixed. 3d. From ten to twelve sutures are inserted in the form of an oval crown. 4th. Excision with the thermo-cautery, of all the portions of intestine comprised within the sutures. Verneuil has practised this method more than twenty times, and has had no bad results; the important point being to excise a large portion of intestine—about two-thirds of the circumference.

Maydl's process is a different one: the sigmoid flexure of the colon is drawn out of the abdominal wound until its mesocolon becomes visible; the mesocolon is then perforated near its intestinal insertion with a blunt instrument; in this opening is introduced a rigid rod, such as a piece of a catheter surrounded by iodoform gauze; this rod is then laid flat upon the abdominal wall. From the fourth to the fifth day a button-hole incision, through about one-third of the circumference of the intestine, is made. On the fourteenth day all the protruding part is excised.

Professor Guyon presented at the last meeting of the Académie des Sciences a very interesting work on the pathological anatomy and physiology of retention of urine, as a result of his clinical observations. Dr. Guyon finds that whatever may be the causes, forms, or duration of retention of urine, fever will never be present if the retention is not of septic origin, or if the patient has not been subjected to infection. Retention of urine, and especially incomplete retention, is always accompanied by polyuria. Moreover, retention of urine always brings on congestion of the urinary organs, which explains why, in prolonged retention, the urine is brown or red. Even a true hæmaturia may occur after a complete and rapid evacuation of the bladder. Experimentally one finds, in the bladder and kidneys, small interstitial hæmorrhages; or even, in prolonged retention, more apparent lesions which are characterized by a flattening and granular state of the renal epithelium.

If the retention lasts a long time, the secretion becomes very much reduced; the bladder loses its contractile power, next the ureters; and then complete stasis of the urine is established. If the retention is only of twenty-four hours' duration, the urethral contraction can be regained by simply evacuating part of the contents of the bladder, or by electrization. If, however, retention has been of long duration, nothing will establish the contractile power—for this phenomenon is under the immediate influence of the intra-vesical tension.

As regards polyuria and congestion, the anatomical lesion and physiological disturbance are in direct relation to the intensity and degree of the tension. Every fact corroborates this, whether in acute states brought on by experimentation, or in chronic states observed in the clinic.

As regards the final results or consequences, they will depend entirely upon the early or late intervention of the surgeon, and whether the bladder alone is involved, or whether all the renal apparatus is out of order.

At the last meeting of the Société Médicale des Hôpitaux, Professor Hayem made an interesting communication on the contractile power of red blood-corpuscles and pseudo-parasites of the blood in extreme anæmia. If normal blood is examined under the microscope, the red blood-corpuscles are found to be immovable; if, however, the blood of an anæmic in whom the number of blood corpuscles is reduced below one million be examined, one finds movement in one part or in the whole mass of the corpuscle. Four different types are described by the author:

In the first, the red globules contract in a mass, and the globule is seen to fold itself up, even appears to undergo segmentation; this is due to an amœboid contraction.

In the second type, one finds red corpuscles of medium or small size presenting prolongations in the form of a glove or flagellæ. These corpuscles are sometimes immovable; at other times their prolongations are seen to move about.

In the third type, one finds corpuscles oscillating around an axis passing through the long diameter.

In a fourth, we have the very small elements of the

blood, which easily displace themselves, and resemble true parasites; they also oscillate around their vertical axes, and are capable of folding movements.

These four types of blood elements can exist in one single drop of blood, excepting the first, which the author has only found in one patient.

THE MILWAUKEE CLINICAL SOCIETY.

To the Editor of THE MEDICAL NEWS,

SIR: Your journal of March 1st published a communication from Milwaukee, giving its present standing in the medical world. Mention was made of some medical societies, and amongst them "The Clinical Club." This club was founded January 1, 1886, and up to the present year was known as "The Bartlett Clinical Club"—named after one of our pioneers in medicine, and a man well known as an active worker in the American Medical Association. Considering that this name was not broad enough to demonstrate the club's work, it has been changed to "The Milwaukee Clinical Society."

The organization and principles upon which it is founded being rather different from medical societies in general, I have thought it might be of interest to the profession to learn of its existence and the groundwork upon which it rests. It is a chartered corporation, without stock, and governed in a measure by a board of directors. The directors not only look after the finances, but all business, usually known as "miscellaneous," is first discussed and voted upon by them, before being presented to the Society for ratification, thus saving the Society's time and giving more chance for clinical work. Members are elected by ballot, and the election must be unanimous. The candidate must be balloted for by every member of the Society, either in person or by sealed ballot to the secretary.

The motto of the Society is *Fraternitas et Scientia*, and in order that the "brotherhood" may be the firmer, the number of members is at present limited to twenty-five, and members are not taken in any faster than they can be thoroughly assimilated. The meetings are monthly. A dinner is served in the rooms at 6 P. M. This social feature of the Society renders that brotherhood so much the firmer. At 8 P. M. the scientific work commences. Two papers more particularly relating to clinical work are read and discussed; then follow clinical reports by members in rotation, and no member is allowed under any condition whatsoever to say during this part of the session, "Nothing to offer." He *must* say something, be it ever so trivial; and it has often been found that some of the simplest and most common clinical work elicits the most discussion, and is of immense advantage in practice. The chair is occupied by a different member of the Society, in alphabetical rotation, at each meeting; thus each member feels that he has a governing voice in the work. The time for adjournment by the constitution is 10 P. M., no matter what may be in process of discussion.

It is an unwritten law that every member must be present at the meetings, and an absence from three consecutive meetings, without good excuse, is sufficient cause for expulsion.

Last year, with nineteen resident members, the average attendance was fifteen. May and December found every member present. Each member has the privilege of inviting a guest to its meetings, thus serving as a convenient means for new-comers to become acquainted with members of the profession, and also giving a good opportunity of entertaining professional visitors from abroad.

The Society owns a library of 1500 volumes, and subscribes for twenty-two German and English journals, and has also commenced a pathological museum.

These methods have been found to be most satisfactory, and a society with more harmony of feeling, personal and professional, cannot be found in the country. It will be seen that the motto, *Fraternitas et Scientia*, is freely carried out in its organization.

SAMUEL W. FRENCH, M.D.
1216 GRAND AVENUE, MILWAUKEE, WIS.

BACTERIOLOGICAL EXAMINATIONS AT AUTOPSIES. BACTERIOLOGICAL EXAMINATION OF DRINKING-WATER.

To the Editor of THE MEDICAL NEWS,

SIR: I am only a general practitioner, residing in a small place in what the people of Philadelphia would denominate "the far West." I have not the privilege of weekly attendance at an academy of medicine or other learned body of medical men. For these reasons I must depend almost exclusively upon reading, in my endeavor to keep within sight of the advancing hosts of medical science. In my reading I meet with a few things which amuse me very much, and with many things which afford me a great deal of instruction. I desire, with your kind permission, to make an occasional comment on what I read.

Among the things which have amused me are two with the titles as given above. The first is a leading editorial in what claims to be, and really should be, one of the best American medical journals. The learned editor attempts to give a synopsis of the instructions of Babes for making bacteriological examinations at autopsies. I will make a quotation from this editorial, italicizing the amusing points so that all may recognize them.

"The first section of the skin, from the chin to the pubes, should include the subcutaneous cellular tissue and the muscles, and is made with one sterilized knife. Another sterilized knife is then used to open the peritoneal and thoracic cavities. *The liquids contained in the peritoneal, pleural, and pericardial cavities are then sterilized by plunging a platinum wire into them, and they are then collected in culture-tubes or on plates previously prepared.* When these liquids are used for inoculating animals, a sterilized syringe should be used. For the bacteriological examination of organs, the surface of the organ is burned with a hot glass-rod over an extent of about 2 cm. The tissue underlying the burn is then torn out. *From this fragment is taken, by means of a red-hot platinum wire, a piece to be used for inoculation. The liquids contained in the intestines, bronchi, bladder, ureter, etc., are collected on gelatin plates.*"

Did anyone ever write anything more mirth-provoking than the above? We may stop laughing at the homœo-

path who talks about the great dynamical potency of his high dilutions. Our editor sterilizes the "liquids contained in the cavities of the body by *plunging* a platinum wire into them." What a deadly instrument a bit of platinum wire must be! But the wonder does not stop here; these very liquids which have been so expeditiously sterilized are used for the preparation of cultures. By what magic power the poor germs in these liquids are endowed with new life when transferred to the tubes and plates we are not told. In the examination of organs, the bit which is used for inoculation purposes is taken up on a red-hot platinum wire. Here the platinum wire, while red-hot, seems to have lost all its powerful germicidal properties. The able editor has not informed us as to the size of the gelatin plates on which he collects the liquids contained in the intestines, bronchi, bladder, ureter, etc., but as he is a Chicago man we could not expect him to be satisfied with drops of these fluids. I wonder if Babes has seen this learned exposition of his instructions? If so, he has probably a very high opinion of the learning of the profession in America.

The second thing which has afforded me much amusement comes from Germany in the shape of a book written by two distinguished professors. Of course, it is the height of absurdity for a village doctor in America to criticise anything from a German professor, but there is no law against being amused, even when the cause is imported at 50 per cent. duty. I have paid the German publisher, and I have helped to swell the surplus in the treasury of the United States, and I want to tell my benighted brethren about the funny things for which I have paid. The volume before me is one of more than 700 pages on the subject of the analysis of drinking-water. The first part is devoted to the chemical analysis of drinking-water, from the pen of Professor Tiemann, of Berlin, and is worth having on account of its great merit; the second part discusses the bacteriological examination of water, is written by Professor Gärtner, of Jena, and contains many facts of value, but its chief merit lies in the conclusions which the learned professor has reached, and which I will lay before your readers. They are as follows:

(1) "A water which contains pathogenic germs should not be used."

These are wise words, but the author goes on to tell us that it is well-nigh impossible to detect pathogenic germs in water, and that we cannot expect to be able to succeed much better in the future.

(2) "A water which may possibly contain pathogenic germs should not be used."

The question now arises, how are we to decide whether or not a given water might possibly contain pathogenic germs or not. The author tells us to decide this matter by an inspection of the surroundings of the source of water-supply. Why, then, we may ask, is there any need of the bacteriological examination?

(3) "A large number of germs in the water of a well whose surroundings are unsanitary, and whose construction is improper, should condemn the use of the water."

(4) "However, if the surroundings are sanitary and the construction proper, the water may be used, notwithstanding the fact that it contains a large number of germs."

Comments upon these conclusions are unnecessary. We have been promised so much from the bacteriological examination of water, and now we are told in sum and substance that if the water contains human excretions and dead animals it is not altogether safe to drink it, but we cannot find out whether these undesirable additions to nature's beverage are present or not, save when we are fortunate enough to see the sewer or other sources of contamination pouring its contents into the water.

NEWS ITEMS.

Lectureship on Orthopædic Surgery in the Woman's Medical College.—H. Augustus Wilson, M.D., Professor of General and Orthopædic Surgery in the Philadelphia Polyclinic and College for Graduates in Medicine, has been elected Lecturer on Orthopædic Surgery by the corporators of the Woman's Medical College, and commenced his course on Thursday, March 20th. The corporators established this new course at the request of the Faculty, who also nominated Dr. Wilson.

A Vacancy.—At present there is a vacancy in the Chair of Pathology and Practice of Medicine in the Medical College of the State of South Carolina, and the Trustees and Faculty are anxious that all persons desiring such a position should apply to them. As is probably known to most of the readers of THE MEDICAL NEWS, this college has now adopted a three-year course, to take effect with the matriculates of 1890.

New York Eye and Ear Infirmary.—The corner-stone of the new building of the New York Eye and Ear Infirmary was laid, with appropriate ceremonies, by the President, Benjamin H. Field, Esq., on March 15th. Addresses were delivered by Mr. J. Harsen Rhoads, the Hon. George William Curtis, and the President. The Hon. Chauncey M. Depew presided over the exercises.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM MARCH 25 TO MARCH 31, 1890.

By direction of the Secretary of War, HENRY P. BIRMINGHAM, *Captain and Assistant Surgeon*, is relieved from the station at Fort Klamath, Oregon, and from temporary duty at Vancouver Barracks, Washington, and will report in person to the commanding officer Boise Barracks, Idaho Territory, for duty at that post. —Par. 6, *S. O. 72, A. G. O., Washington, D. C.*, March 27, 1890.

TAYLOR, M. E., *Captain and Assistant Surgeon.*—Is granted leave of absence for one month, on surgeon's certificate of disability, with permission to apply for an extension of one month. —Par. 3, *S. O. 26, Department of the Columbia*, March 18, 1890.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE-HOSPITAL SERVICE, FROM MARCH 3 TO MARCH 24, 1890.

LONG, W. H., *Surgeon.*—Leave of absence extended five days, March 11, 1890.

DEVAN, S. C., *Passed Assistant Surgeon.*—To proceed to Erie, Pa., as Inspector, March 12, 1890.

HEATH, F. C., *Assistant Surgeon.*—To proceed to Cleveland, Ohio, for temporary duty, March 18, 1890.

STIMPSON, W. G., *Assistant Surgeon.*—Commissioned Assistant Surgeon March 11, 1890. Assigned to temporary duty at New York, March 13, 1890.